

**BYLAW NO. 23-12**

**LEDUC COUNTY**

**A BYLAW OF LEDUC COUNTY, IN THE PROVINCE OF ALBERTA, TO ADOPT THE  
QUEEN ELIZABETH II BUSINESS PARK LOCAL AREA STRUCTURE PLAN.**

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**WHEREAS**

The Council of Leduc County deems it to be in the public interest to adopt the Queen Elizabeth II Business Park Local Area Structure Plan;

**NOW THEREFORE,**

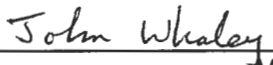
be it resolved that the Council of Leduc County, duly assembled, hereby enacts that the Queen Elizabeth II Business Park Local Area Structure Plan, being Schedule "A", attached to and forming part of this Bylaw, be adopted.

This By-law shall take effect on the date of the third reading.

Read a first time this 25<sup>th</sup> day of September, AD., 2012.

Read a second time 25<sup>th</sup> day of September, AD., 2012.

Read a third time with the unanimous consent of Council Members present and finally passed this 25<sup>th</sup> day of September, A.D., 2012.

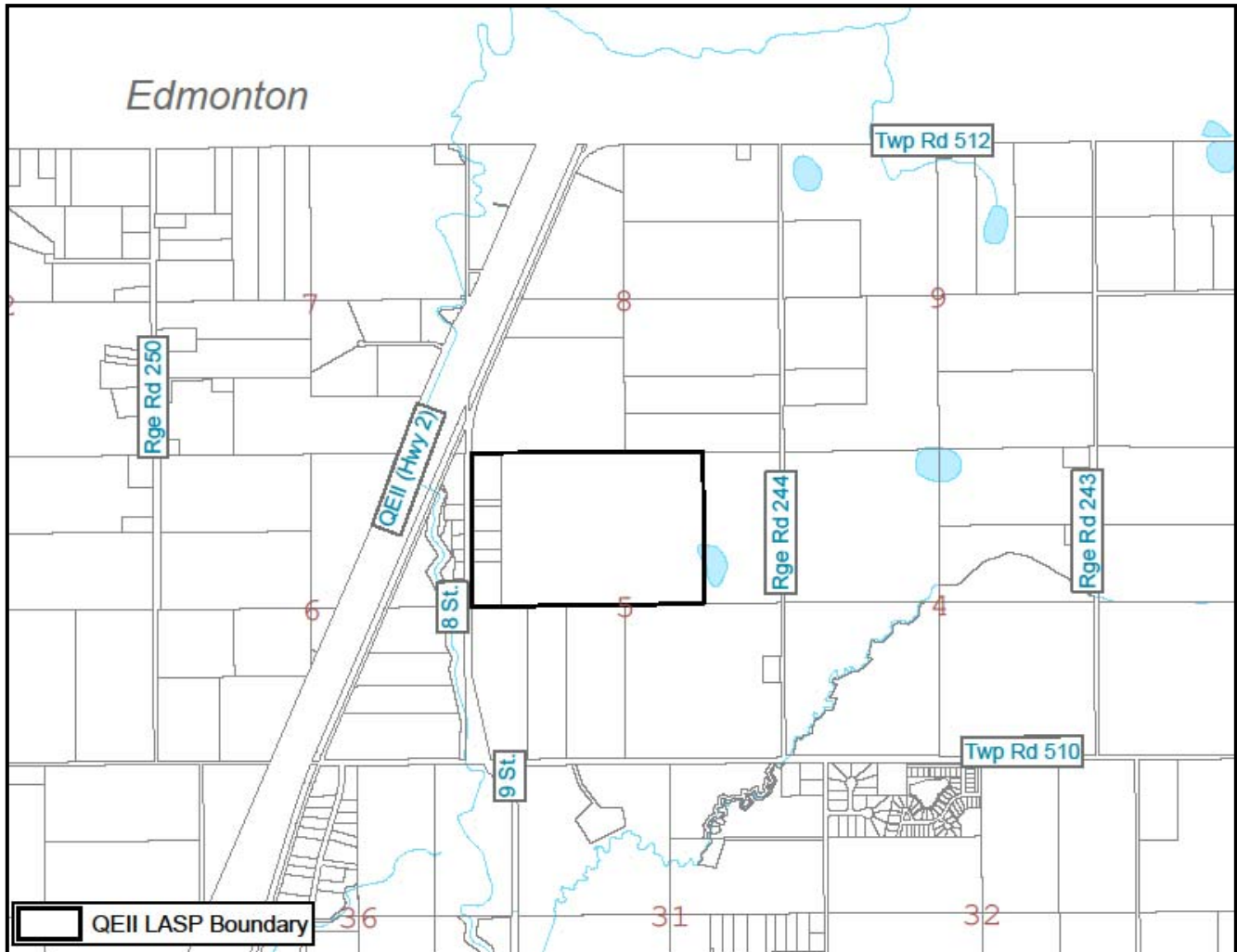
  
\_\_\_\_\_  
MAYOR

  
\_\_\_\_\_  
COUNTY MANAGER

Schedule "A" QE II Business Park  
Local Area Structure Plan

Bylaw 23-12

QEII Business Park Local Area Structure Plan



Plan Area:

Pt. NW 5-51-21-W4M, Lot 3, Block 3, Plan  
072 1326 And Pt. W ½ of the NE ¼ 5-51-24-  
W4



*Submitted on behalf of*



*and*



*September 2012*

**Bylaw No. 23-12  
Schedule "A"**

**QEII BUSINESS PARK  
LOCAL AREA STRUCTURE PLAN**

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**QEII Business Park  
LOCAL AREA STRUCTURE PLAN**

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## **1. INTRODUCTION**

### **1.1 Purpose**

The purpose of this Local Area Structure Plan (LASP) is to provide a framework to guide the future subdivision and development of a site located within the boundaries of the Leduc County North Major Area Structure Plan. The Leduc County Major North Area Structure Plan (ASP) is a broad policy based document that requires the preparation of more detailed plans to consider land use, patterns of development, location of roads and municipal servicing at the local level.

The LASP is referred to as the QE II Business Park and has been prepared on behalf of Hopewell Developments (Leduc) Inc. Hopewell is the sole owner of the Plan Area which comprises some 96.2 hectares (237.6 acres). The Plan area location is shown on Figure 1.

Because the LASP is a statutory plan and not a plan of subdivision, all boundaries and parcel sizes shown on the maps contained herein need to be verified at the time of subdivision. It is assumed that minor deviations to the Future Land Use Concept will be permitted. Any major deviations to this LASP will require an amendment.

### **1.2 Location and Legal Description**

The QEII LASP area is located in Leduc County directly east of the QEII Highway and CP Rail corridor, and 1.5 miles north of Highway 625 (see Figure 1). The Plan area is bounded to the north, south and west by existing industrial development, and to the east by cultivated agricultural lands.

The Plan area includes an undeveloped industrial subdivision comprising five lots extends along the east side of 8<sup>th</sup> Street that parallels the rail line and provides access to the LASP site. This subdivision is legally described as Plan 012 6297 and contains 12.46 hectares (30.79 acres).

The remaining 83.7 hectare (206.8 acres) of the Plan area is legally described as Lot 3, Block 3, Plan 072 1326 and includes the NW ¼ of 5-51-24 W4M and the west ½ of the NE ¼ of 5-51-24 W4M. As is noted above, the combined area of the two Plans is 96.2 hectares.

### **1.3 Policy Context**

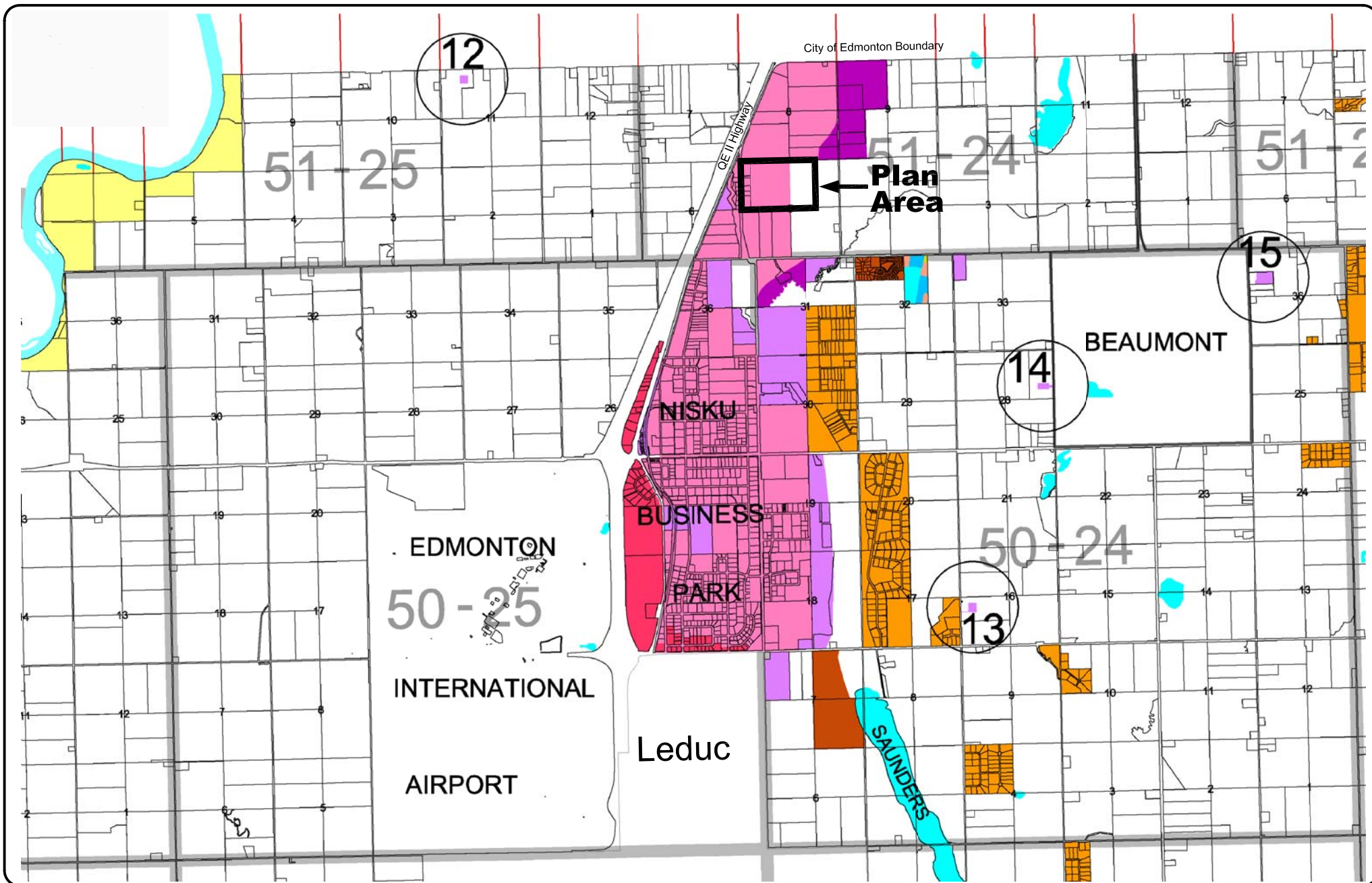
The LASP complies with the County's statutory plans. It also complies with the principles and policies of the Capital Region Growth Plan.

#### **1.3.1 Capital Region Growth Plan**

Compliance with the Capital Region Growth Plan (CRGP) is a provincially mandated requirement through the Municipal Government Act. *A fundamental principle of the Capital Region Plan is the requirement to intensify development in order to minimize the development footprint and utilize existing and future infrastructure as efficiently as possible.*

The Plan area is contained within Priority Growth Area "Ce" of the CRGP. The intent of the Capital Region Growth Plan (CRGP) is that growth be directed to Priority Growth Areas and that land use and infrastructure investment decisions be integrated. Specifically, the CRGP requires that new development:

- Promote an integrated and strategic approach to planning for future growth;
- Make key infrastructure investments that best compliment existing infrastructure, services and land uses in the Capital Region; and,
- Co-ordinate decisions to sustain economic growth.



**QE II Business Park  
Local Area Structure Plan**  
Nisku Industrial Development - Leduc County

**Figure 1  
Location**

This LASP recognizes the requirements of the CRGP by promoting a strategic approach to planning, investing in key infrastructure that compliments existing infrastructure, and by encouraging economic growth. In particular, the LASP recognizes the right-of-way requirements for Nisku Spine Road which is shown on the Regional Transportation Infrastructure Map of the December Addendum to the CRGP. The future Spine Road extends along the east boundary of the Plan area.

### **1.3.2 Municipal Development Plan (1999)**

The Municipal Development Plan (MDP) adopted in 1999 describes planning objectives and policies for a range of land uses including business industrial. Map 3 of the MDP - Future Land Use Policy has been amended to include the Leduc North Major ASP Land Use Strategy as a policy overlay. This LASP complies with the MDP policies and land uses.

### **1.3.3 Leduc County North Major Area Structure Plan**

As is noted in Section 1.1, the QE II Plan area is included in the Leduc County North Major ASP (NMAASP) which was adopted by Leduc County in October of 2004 (see Figure 2). The NMAASP provides a long-range land use strategy for an extensive area and establishes goals and policies to guide land use change within the Leduc North area. It requires that more detailed LASPs be prepared in advance of development. This LASP meets that requirement and the uses proposed generally comply with the combination of Business Park and Business Industrial land uses designated for the Plan area by the NMAASP.

It is important to note however that the NMAASP shows the alignment for the future Nisku Spine Road as bisecting the most easterly portion of the QE II Plan area. The lands to the west of the future Spine Road are designated Business Industrial Area by the NMAASP whereas the lands to the east are designated Business Park Area. The recently adopted Functional Plan for the Spine Road confirms that the road will extend along the east boundary of the QE II Plan area rather than bisecting it. This means all of the QE II Plan area should be designated Business Industrial Area to maintain a logical planning unit.

### **1.3.4 Leduc County Land Use Bylaw 7-08**

Existing zoning is shown on Figure 1. The westerly two thirds of the Plan area including the existing five lot subdivision are zoned Industrial (IND) by Leduc County's Land Use Bylaw (7-08 March 2008). The easterly 32 hectare portion of the Plan area is zoned Agricultural (AG). This LASP will provide the statutory planning basis for rezoning the 32 hectares from AG to IND.

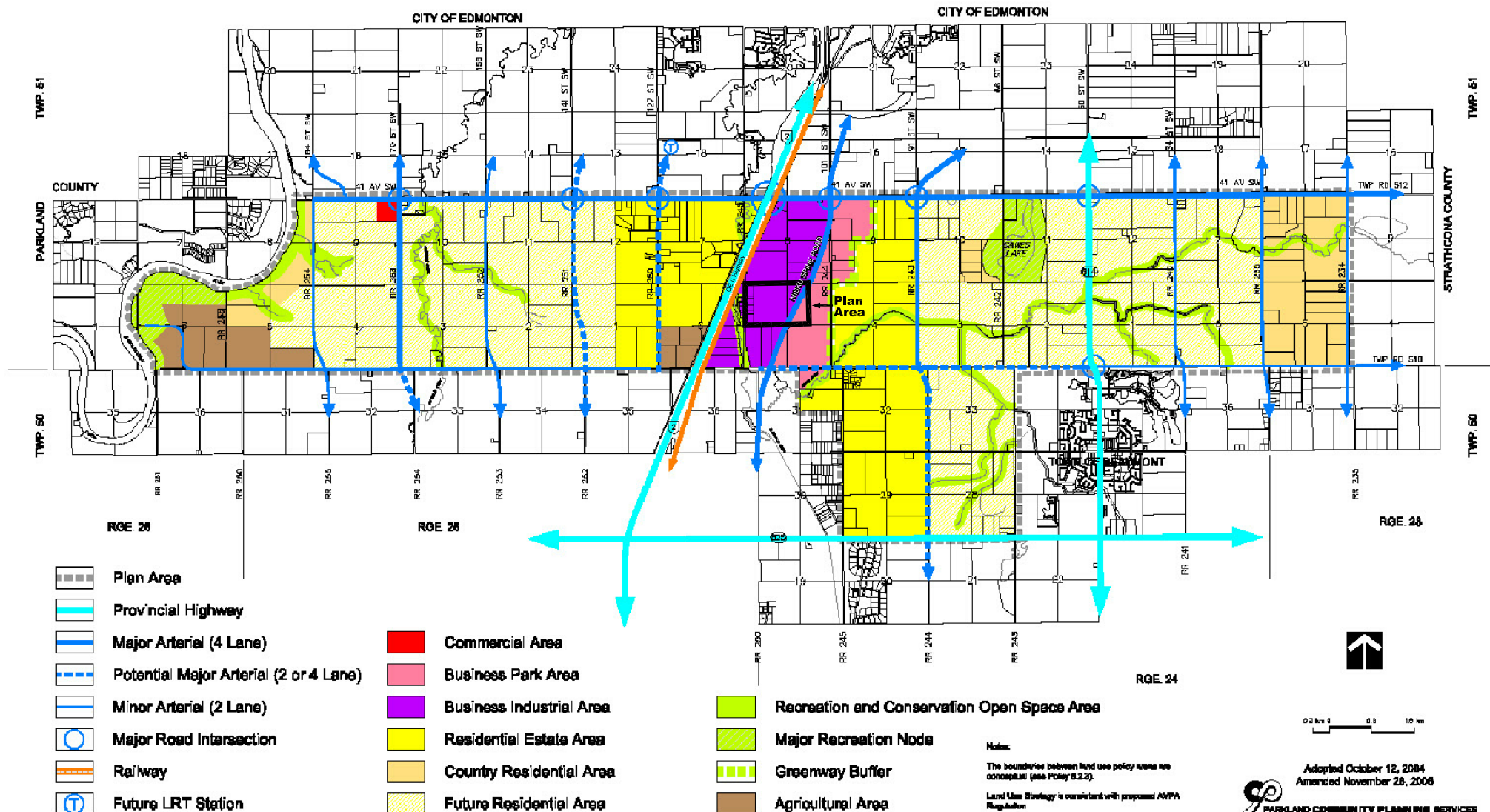
### **1.3.5 Edmonton International Airport Vicinity Protection Area Regulations (AVPA)**

The Edmonton International Airport Vicinity Protection Area Regulation (AR 63/81) regulates development on lands in the vicinity of the airport. The AVPA regulation allows for a variety of industrial and commercial activities. The NMAASP states that the land use strategy proposed is consistent with the proposed AVPA Regulations. This means that the LASP also will be consistent with AVPA Regulation.

### **1.3.6 Highway 2 Corridor Design Guidelines**

The Highway 2 Corridor Design Guidelines were approved in 1995 and apply to lands located adjacent to or that are visible from the QE II Highway. The Design Guidelines are non-binding but provide design recommendations to improve the aesthetics of new development along the Corridor.





## **2. THE DEVELOPMENT AREA**

### **2.1 Topography and Vegetation**

The Plan area contains no significant physical features (see Figure 3). The land slopes from east to west into the Blackmud Creek drainage channel that parallels CP Rail and the QE II Highway to the west. The creek then trends to the northwest under both CP and the Highway. Although some scattered shrubs are evident in the westerly two thirds of the Plan area, it is mostly cultivated.

### **2.2 Geotechnical Conditions**

Soil and near surface groundwater conditions were investigated by CT & Associates Engineering Inc. in 2007. CT Engineering has provided a current 2012 addendum to the 2007 investigation to recognize elapsed time. The addendum concludes that site conditions have not changed.

Generally the site is covered with 0.1 to 0.3 metres of topsoil, underlain with clay/clay till. Multiple locations show the clay/clay till being underlain by bentonite and bedrock. At completion of drilling, no groundwater or sloughing was encountered at most of the borehole locations.

Generally the site is considered feasible for commercial/industrial development, though based on the shallow high plastic bedrock soils and bentonite, special considerations in design and construction will be necessary. The full geotechnical report and the addendum letter are provided under separate cover.

### **2.3 Wetland Assessment**

A Wetlands Assessment was completed by Stantec Consulting Ltd. in 2009. Although there are several wetlands within the subject property, Public Lands will not be claiming any of the wetlands (per meetings held in May 2009). Because of the proximity of the parcel to the International Airport, and the resultant restrictions on storm water management facilities from the Airport Vicinity Protection Area, limited opportunity exists to develop on-site compensation for wetlands disturbed by development. Compensation is required for the disturbance of any existing wetland in order to comply with Alberta Environment's *no net loss* policy. Due to the limited opportunity for on-site compensation, the Stantec report proposes that any compensation required under the Water Act be completed through financial payment, perhaps financing a wetland project off-site. The total wetland area of the Plan area that would require compensation if disturbed is 2.193 hectares. Compensation is required at a minimum ratio of 3:1. The Wetland Assessment is provided under separate cover.

### **2.4 Phase 1 Environmental Site Assessments**

Two Phase 1 Environmental Sites Assessments were undertaken in 2006 for the Plan area: one for the westerly two thirds of the Plan area by CT & Associates Engineering; and, a second by Stantec Consulting for the easterly one third. The Site Assessments are provided under separate cover. The CT & Associates Assessment concludes that no environmental concerns related to historic or current activities exist. However, the Assessment also determined that a small four by six metre area of unknown fill material that appears to be related to a former roadway should be further investigated although it appears unlikely that any environmental risk exists. The type of fill will be determined at the time of site grading and if warranted will be further investigated. The Stantec Assessment determined that no potential environmental concerns exist. Given that the existing five lot subdivision was registered in 2001, it is assumed that this subdivision is also unencumbered by any environmental concerns.







## **2.5 Existing Land Use**

Other than an Atco gas pipeline that runs adjacent to the north boundary of the NW-5-51-24-4, no developments exist within the Plan area.

## **2.6 Surrounding Land Use**

The Plan area is surrounded by a combination of industrial and agricultural development.

**To the south**, a lay down yard with ancillary structures exist adjacent to 8<sup>th</sup> Street with cultivated farmland further to the east of the lay down yard. A future freeway is being proposed by Alberta Transportation that will require a 150 metres wide right-of-way extending along the entire south side of the Plan area.

**To the west**, a row of developed industrial lots front onto the west side of 8<sup>th</sup> Street.

**To the north**, a vacant parcel exists that is owned by Finning. It may be used in future by Finning to operate its caterpillar parts and services business. The 2008 WAM LASP applies to these and other lands to the north and northeast. The road linkages established by the WAM LASP are recognized by this LASP. Again however, the alignment shown for the Nisku Spine Road by the WAM LASP is not consistent with the current alignment.

**To the east**, the land is mostly cultivated farmland but is slated for future business park and estate residential development by the LNMA SP.

## **2.7 Municipal Reserve**

Municipal Reserve owing will be by Deferred Reserve Caveat (DRC). DRC #012414693 for 6.39 hectares is registered on title for the NW ¼ of 5-51-24-4 which is part of Lot 3 Block 3 Plan 0721326. This caveat includes Municipal Reserve owing for the five lot subdivision registered as Plan 0126297. At the time of subdivision of Stage 1, the existing DRC will be discharged and a new DRC for 8.37 hectares Municipal Reserve owing will be registered on the title of the remnant parcel (remainder of Lot 3 Block 3 Plan 0721326).

## **2.8 Nisku Spine Road**

As is noted in Section 1, the Functional Plan for Nisku Spine Road has confirmed the alignment and right-of-way requirements for this regional arterial that extends along the east boundary of the QE II Business Park Plan area. The Spine Road will be an extension of 91<sup>st</sup> Street in Edmonton and will initially be constructed from 41<sup>st</sup> Avenue which defines the boundary between Edmonton and Leduc County, to 25<sup>th</sup> Avenue in Nisku Business Park. The Integrated Regional Transportation Master Plan that has been adopted by the Capital Region Board shows that, in the long term, Nisku Spine Road will extend around the east side of the City of Leduc to link with Highway 2A which in turn links to the QE II Highway. The landowner will allow Leduc County to secure the Nisku Spine Road right-of-way through a combination of purchase and dedication at the time of subdivision. Any lands separated by the Spine Road from the balance of the Plan area will be purchased by the County.

## **2.9 Freeway Corridor**

Alberta Transportation has identified the need for a freeway to be constructed in some 40 to 50 years to serve the Capital Region. A potential freeway corridor has been proposed that impacts the southerly 150 metres of the Plan area. An interchange may be constructed at the southeast corner of the Plan area where the freeway will intersect with the Nisku Spine Road. The County will provide for any right of way requirements for this interchange. No direct access from the Plan area will be permitted to the freeway.

Access to the development will be from Nisku Spine Road, at an intersection that will be located approximately 800 metre north of the freeway/Spine Road interchange.

#### **2.10 Historical Resources**

An Historical Resources Assessment was undertaken by The Archaeological Group in February 2012. The Overview concluded that due to the poorly drained nature of the western two thirds of the Plan area and the intensive previous agricultural disturbance in the eastern one third, the potential for the discovery of intact, previously unrecorded heritage resources is low, and no further Historical Resources Assessment work is recommended. A Historical Resources Act clearance has been granted by Alberta Culture. Both the Assessment and the Clearance from Alberta Culture are contained in Appendix A.

### 3. LAND USE CONCEPT

#### 3.1 Introduction

The Development Concept proposed for the Plan area is illustrated by Figure 4. The development of the QE II Business Park will enhance the strong industrial base already existing in Leduc County. The proximity of the Business Park to major transportation facilities such as the Queen Elizabeth II Highway (Gateway Boulevard/ Calgary Trail) Corridor, Anthony Henday Drive, Highway 19/625, the Edmonton International Airport and the CP Rail line makes the Plan area a very attractive location for industrial businesses.

Industrial uses are proposed to comply with the County's Industrial District as defined by the Land Use Bylaw. The purpose of this District is *to accommodate a range of compatible industrial and commercial uses, the location of which is typically guided by an Area Structure Plan or Area Redevelopment Plan. Such uses should have a low to moderate impact on adjacent land uses.* It is proposed that the easterly 32 hectare portion of the Plan area that is currently zoned Agricultural be rezoned to Industrial.

#### 3.2 Proposed Development Concept

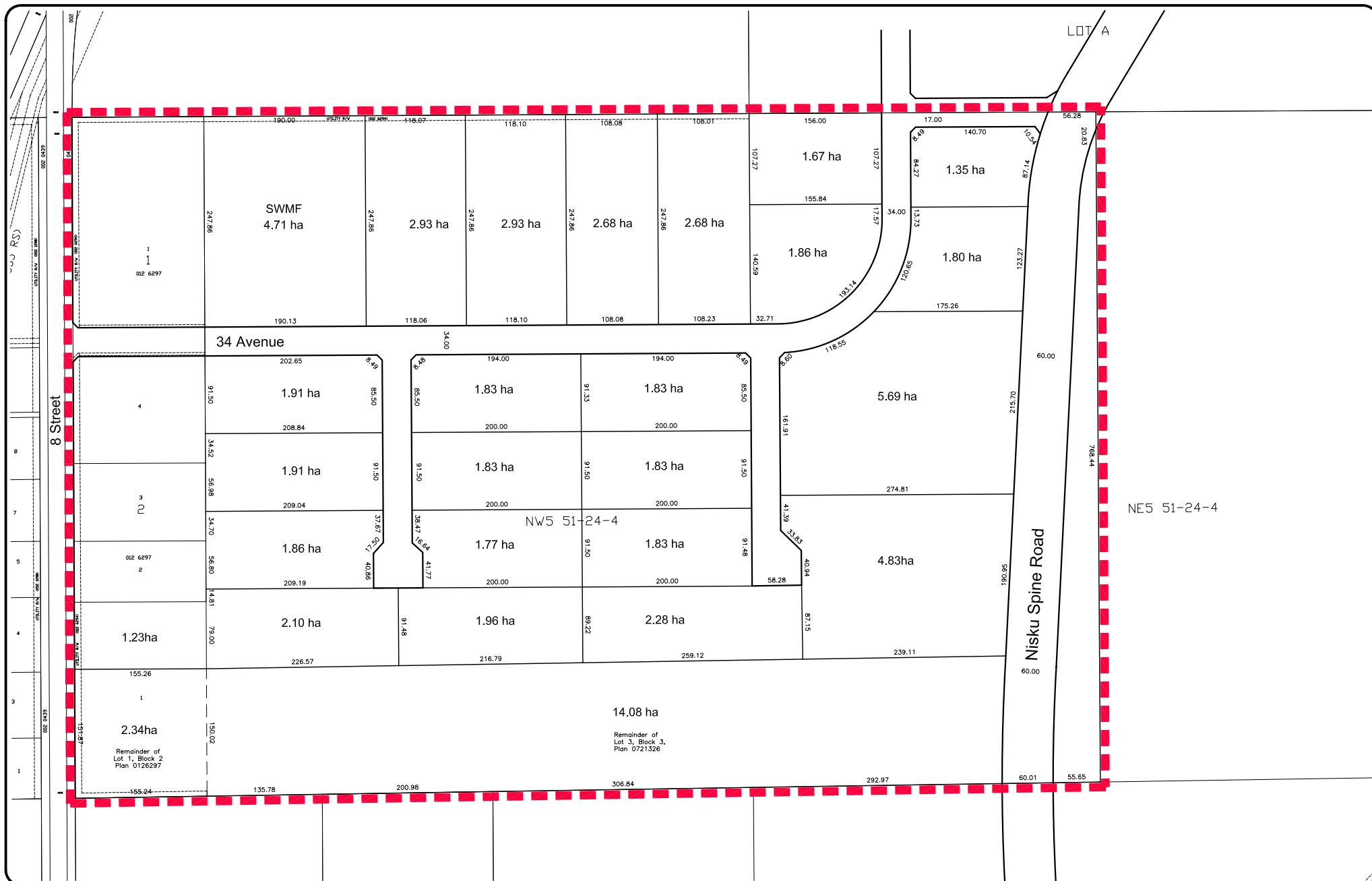
The development concept focuses on efficiency by minimizing road length while maximizing the number of industrial lots. Twenty two (22) new industrial lots are proposed ranging in size from 1.35 hectares to 5.69 hectares. Parcel sizes may vary at the time of subdivision. The smaller lots provide opportunities for consolidation thereby maximizing flexibility to meet variations in market demand.

A Storm Water Management Facility is proposed to be contained within a 4.71 hectare future Public Utility Lot located in the northwest corner of the plan area to take advantage of the natural topography. The exact design and configuration of this facility will be determined at the time of detailed design and subdivision.

To accommodate the future freeway, Alberta Transportation requires that a single parcel be created to allow for the proposed 150 metre wide right-of-way within the Plan area. As such, Lot 1 Block 2 Plan 0126297 will be subdivided to create a 150 metre wide remnant parcel that will be consolidated with the remnant of Lot 3 Block 3 Plan 0721326 to create a single parcel. Given the 40 to 50 year time frame for the potential construction of the freeway, an industrial use that complies with the Land Use Bylaw can exist until such time as the right-of-way is required. It will then be purchased by Alberta Transportation. Development permit applications will be referred to Alberta Transportation as required by the County and provincial legislation. Development permit applications will need to consider the Highway 2 Corridor Design Guidelines. A caveat on title will be registered by Alberta Transportation at the time of subdivision.

Primary access into the QEII Business Park will be off the future Nisku Spine Road. An east/west internal subdivision road is proposed to connect the Spine Road to 8<sup>th</sup> Street providing for a second access into the Plan area. Connectivity to the north is proposed to parallel the Spine Road. Two cul de sacs extend from the east/west subdivision road to the south. Access to the consolidated remnant parcel is available off 8<sup>th</sup> Street.

Internal subdivision roads are proposed to be 34 metres wide. As such, a relaxation of the 6.0 metre front yard setback as per the Industrial District may be considered. Transportation is discussed in greater detail in Section 4.



Employment at full build out is projected to be 1,673 based on 26 jobs/net hectare as per the 2011 Industrial Land Strategy prepared for the City of Edmonton. The 26 jobs/net hectare applies to the types of general industrial uses proposed for the QE II Business Park.

Table 1 provides Development Statistics for the Plan area.

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**Table 1 - Development Statistics**

	Area (ha)
<b>Gross Area</b>	<b>96.2</b>
Nisku Spine Road	4.8
Fragment East of Spine Road	2.8
<i>Municipal Reserve Owing (DRC)</i>	<i>8.4</i>
<b>Developable Area</b>	<b>88.6</b>
Stormwater Management Facilities	4.7
Local Roads	6.9
Industrial Lots	60.6
Remnant	16.4

**Note:** A 2.8 hectare fragment separated by Nisku Spine Road from the balance of the Plan area is assumed to be purchased by the County as part of the right-of-way for the Nisku Spine Road since this fragment is sterilized for industrial development as part of the QE II Business Park.

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## **4. TRANSPORTATION**

### **4.1 Queen Elizabeth II Highway (Gateway Boulevard/ Calgary Trail)**

Although the QE II Highway (Gateway Boulevard/ Calgary Trail) does not directly border the Plan area, all highly visible developments in this area adjacent to the QE II are governed by the Highway 2 Corridor Landscape Design Guidelines to ensure high quality appearance. No direct access to the QE II from the Plan area exists now or in the future.

### **4.2 Existing Business Access**

Existing businesses located between QE II and the Plan area are currently accessed by means of 8<sup>th</sup> Street, which parallels QE II northbound and turns eastward at 41 Avenue SW. 41 Avenue SW exits onto 101 Street SW/Range Road 244 and will intersect with the future Nisku Spine Road. The proposed internal roadway system for the Plan area assumes the extension of 34<sup>th</sup> Avenue to provide one direct link between 8<sup>th</sup> Street to Nisku Spine Road. The introduction of this link will increase accessibility and shorten commutes.

The enhanced accessibility provided will increase safety by expanding egress options in case of emergencies. As well, a future interchange at 41 Avenue and QE II Highway will eventually eliminate the existing north access from 8<sup>th</sup> Street/41 Avenue rendering the Spine Road connector essential.

### **4.3 Nisku Spine Road**

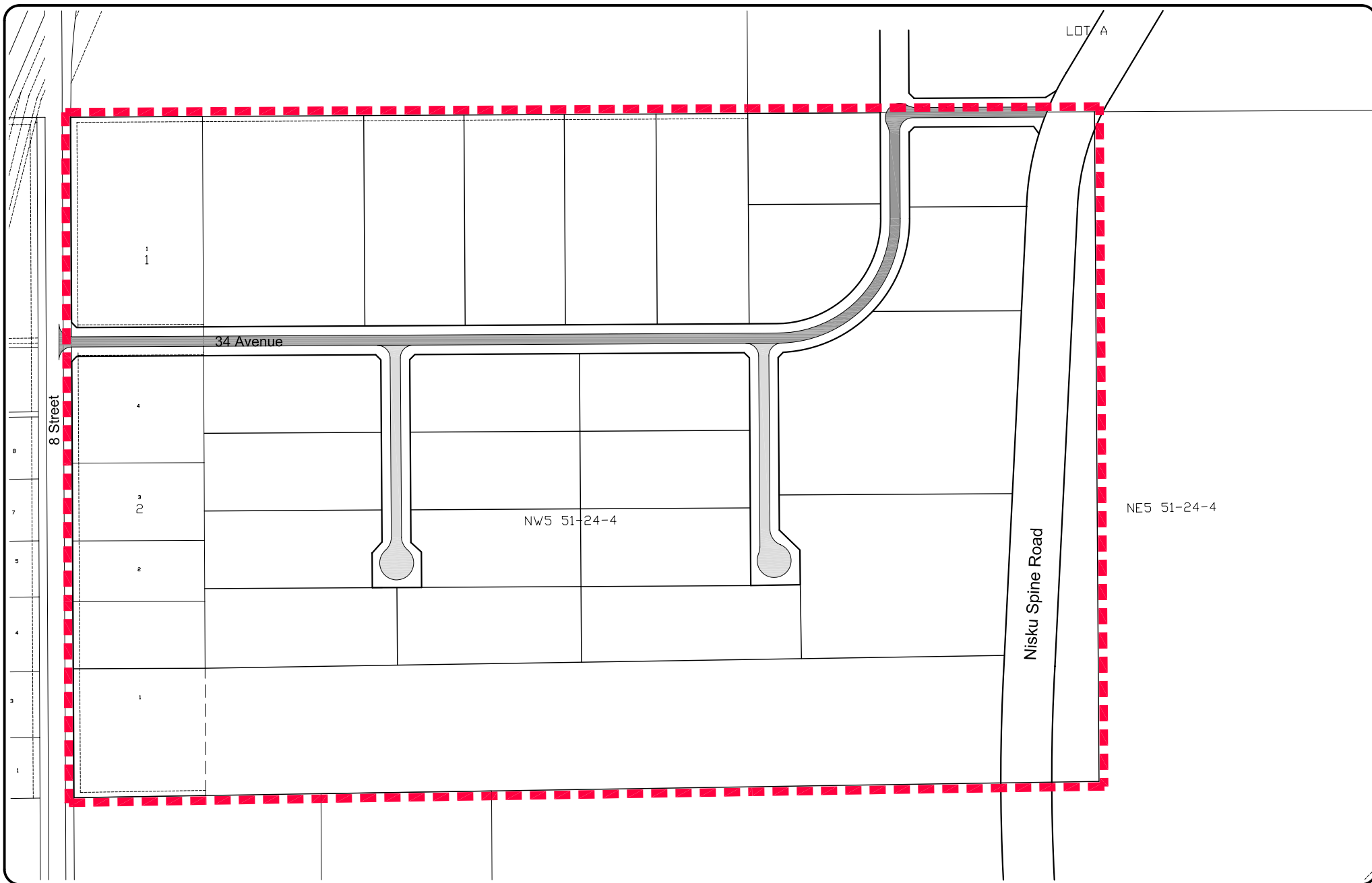
The current primary access to the LASP area is from the north via the 41<sup>st</sup> Avenue arterial that turns into southbound 8<sup>th</sup> Street. Access from the south can be obtained by following Township Road 510 west to 8<sup>th</sup> Street, then northbound. The approved proposed Nisku Spine Road alignment runs north-south on the east edge of the Plan area. Direct access to parcels from the Spine Road will not be permitted. Ultimately, a signalized all-directional access will be provided from the LASP area to/from the Nisku Spine Road.

The April 2008 Off-site Levy Bylaw (and any amendments thereto) requires that participating land owners proportionately pay their share to Leduc County for the construction of Nisku Spine Road. The proposed Nisku Spine Road is a six lane facility to be constructed in a 60 metre wide right-of-way. Developers will be required to complete ultimate grading but are only required to construct the first two lanes. The final construction will be initiated as traffic counts dictate and will be funded with contributions from the Off-site Levy Bylaw and built as per designs approved by Leduc County.

### **4.4 Local Subdivision Road Network**

The proposed internal local road network is based on a rural cross section with ditches. The local network will provide direct access to all internal industrial parcels. As is noted in Section 3, direct access from the Nisku Spine Road will not be allowed. All internal road right-of-ways will be 34 metres wide. Figure 5 shows the proposed road network. The east-west connector roadway (34<sup>th</sup> Avenue) will run from 8<sup>th</sup> Street to the future Nisku Spine Road. Access to development in the Plan area will be via the 34<sup>th</sup> Avenue connection to 8<sup>th</sup> Street until such time that construction of the Spine Road is completed.

The parcels to the north will be accessible directly from the collector road. Two cul-de-sacs to the south will provide access to the remaining parcels. The remnant parcel of the south 150m of the development will have access from 8<sup>th</sup> Street. The collector connection to the Spine Road in the north-east corner of the LASP will provide the opportunity for roadway extension to development north of the LASP boundary in the future.



Legend

Plan Area

34 m Collector Road

34 m Local Road



**QE II Business Park  
Local Area Structure Plan  
Nisku Industrial Development - Leduc County**

**Figure 5  
Transportation**



1:6000  
Sept. 2012





#### **4.5 Transportation Impact Analysis**

A Transportation Impact Analysis (TIA) was undertaken by Bunt & Associates to determine the impacts of the proposed development traffic on the existing roadway network, and identify connections with future roadway systems. The TIA considered the closure of 8<sup>th</sup> Street at 41 Avenue in the study horizon.

The study concludes that the initial intersection of the collector road intersection (37 Avenue) with the Nisku Spine Road will not be signalized. However, within the study horizon, (2022) it is expected that signalization will be required. Additionally, it is anticipated that by 2022 the Nisku Spine Road will be four lanes with dedicated right and left turn lanes, and 37 Avenue will have dedicated left turn lanes. To accommodate this, the initial construction of 37 Avenue will create adequate pavement width for creation of the left turn lanes in the future without requiring roadway widening.

The collector road connection (34 Avenue) with 8<sup>th</sup> Street is expected to operate well as a stop controlled condition without requirement for dedicated turn lanes.

## **5. UTILITY SERVICES**

### **5.1 Water**

Water service will be extended from the west and carried through the site to provide servicing for the subdivision. The new water line will tie-in to the existing regional water line parallel to 8<sup>th</sup> Street. A connection with the future watermain on the Spine Road is proposed. This will provide long term looping for the water system and allow for possible future extension to the north and east. Water mains will follow the internal roadways of the Plan area and are shown on Figure 6.

Lot purchasers will be responsible for their own water service connections to the mains provided within the LASP boundary.

### **5.2 Sanitary Sewer Service**

Sanitary servicing will be brought into the development from the existing 375mm sewer main that runs parallel to 8<sup>th</sup> Street on the east side of the roadway (see Figure 7). This sanitary sewer main connects to the South East Regional Trunk line (SERT) near the north boundary of the LASP.

The new sanitary sewer will be located within the proposed road right-of-way paralleling the internal road network. The sanitary system will be designed to handle expected flows for commercial / business development of lots proposed within the 83.6 hectare Plan area. The opportunity to oversize the sanitary service to facilitate extension to further development in the north or east exists. However implementation will depend on consultation with the County.

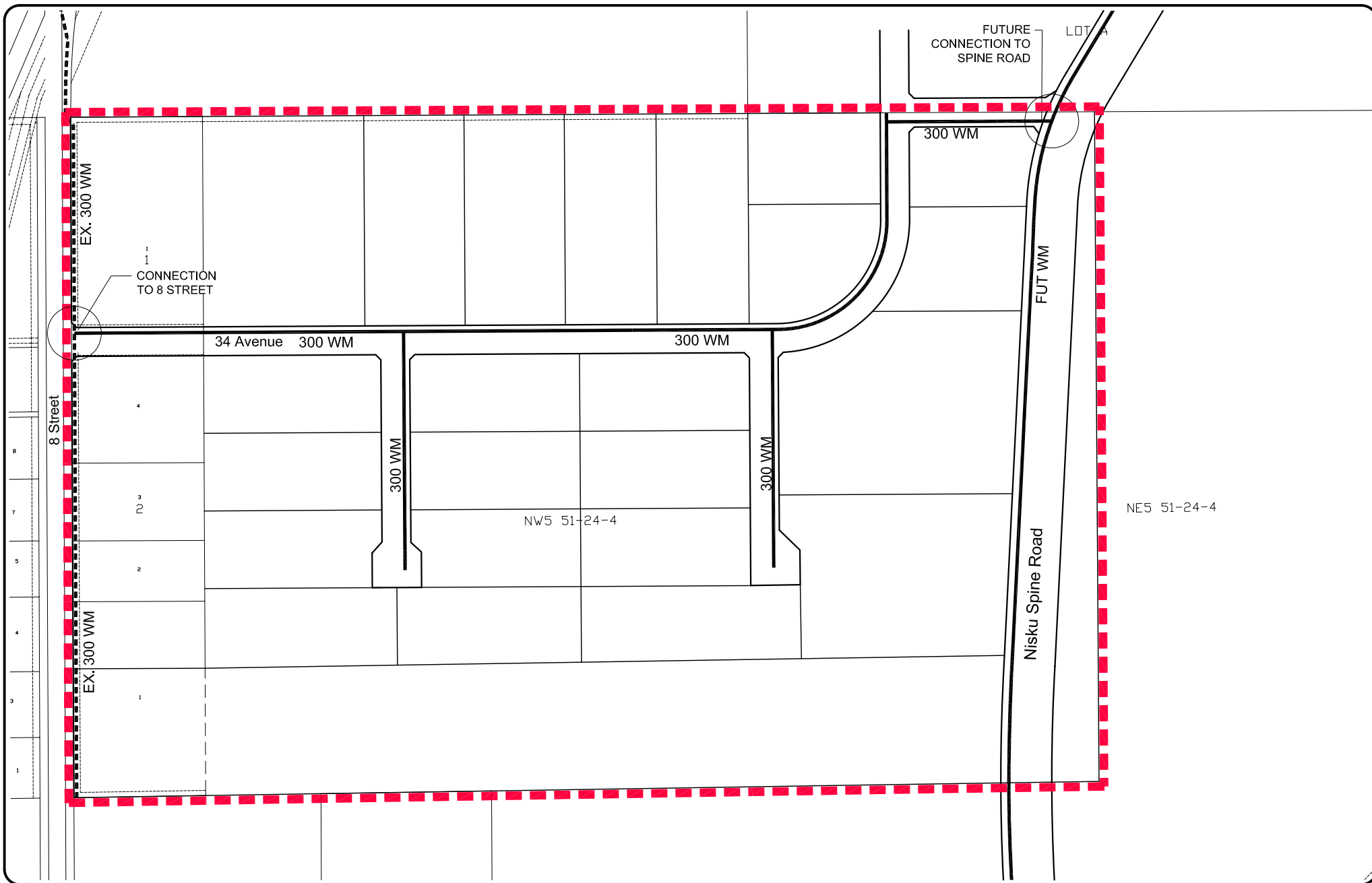
### **5.3 Storm Water Management Facilities (SWMF)**

Onsite overland drainage patterns are generally from the east to the west (see Figure 8). The proposed site grading will shift the overland drainage to flow southeast to the northwest. A 4.71 hectare SWMF is proposed in the northwest corner of the site. Overland flows will be directed to the SWMF through the roadway ditch system. From the SWMF, an underground storm pipe will discharge water into the 8<sup>th</sup> Street ditch system where it flows through a system of culverts to the west into the Blackmud Creek. Discharge from the facility will be limited to a flow rate of 4.0l/s/ha.

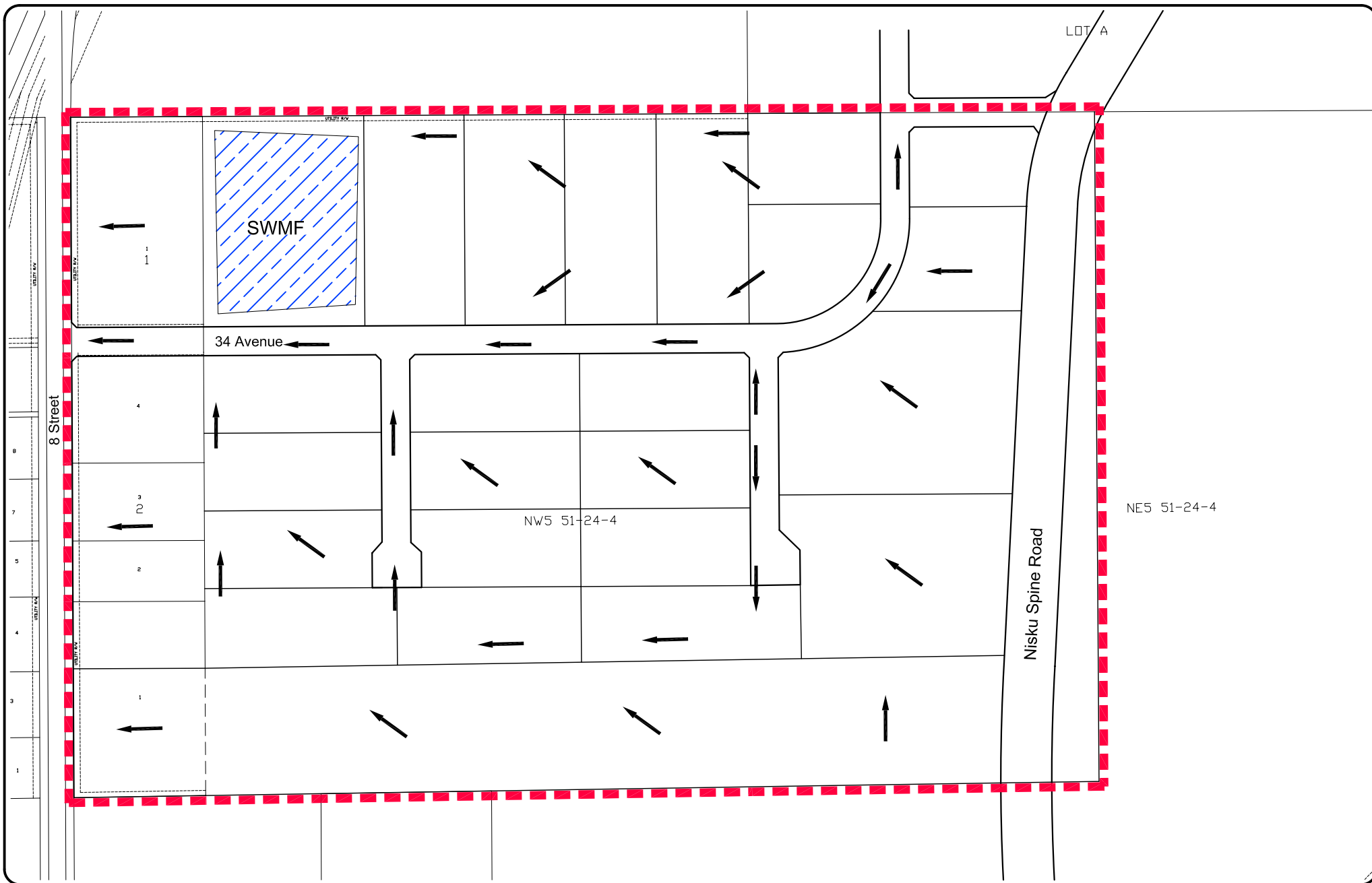
The Storm Water Management Facility will be designed as a dry pond with a shallow vegetated swale along the bottom to provide necessary water quality treatment. Open water within the facility will be restricted to adhere with the requirements of the Airport Vicinity Protection Area Regulations. The wetland vegetation and naturalization of the facility will consider passive bird hazard mitigation measures to ensure that birds do not use the site, especially large flocking waterfowl such as gulls and geese. The facility will be designed to comply with Alberta Environment's regulations for water quality and treatment.

### **5.4 Shallow Utilities**

Shallow utilities including street lighting, natural gas, power, and communication lines are available for extension into the Plan area from adjacent developments. Gas, power, telephone and cable TV lines will be located in the road right-of-way or through easements on private land. Services will be available to all parcels. Connections to lots will be the responsibility of landowners and individual developers.







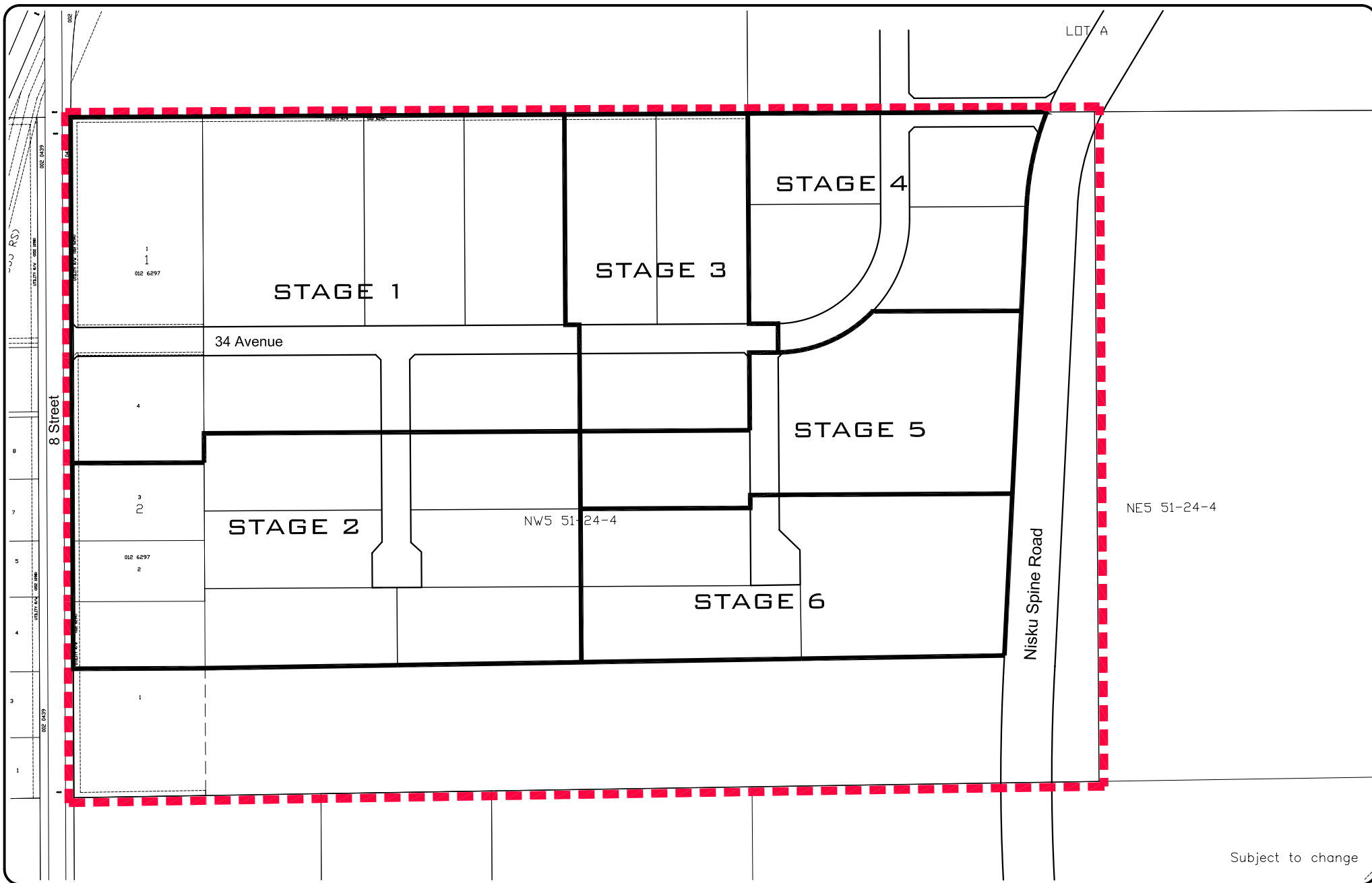
## **6. IMPLEMENTATION AND STAGING**

The Land Use Bylaw will be amended for the easterly 32 hectares of the Plan area such that the existing Agricultural District is rezoned to Industrial District.

Development of the Plan area is potentially proposed to be completed in six stages, beginning at the west limits of the site then moving to the east. The first stage of construction will involve the SWMF and the extension of 34 Avenue east into the Plan area. Sufficient temporary access will be provided during all phases of construction.

The consolidated remnant required for the Freeway Corridor will be created at the time of the second stage of subdivision. Access to the remnant exists off 8<sup>th</sup> Street.

It is important to note that the staging being proposed is conceptual. Construction will proceed in an orderly fashion dependent upon market conditions and development constraints. Detailed subdivision applications will be submitted to Leduc County for review and approval by the Subdivision Authority.





## **Appendix A**

### **Historical Resources Overview**

## **Appendix A**

### **Historical Resources Overview**

## Statement of Justification for *Historical Resources Act* Requirements for projects other than small-scale oil and gas

This document contains sensitive information about Historic Resources that are protected under provisions of the *Alberta Historical Resources Act*. This information is to be used to assist in planning the proposed project only. It is not to be disseminated, and no copies of this document are to be made without written permission of Historic Resources Management Branch, Alberta Culture and Community Spirit.

<b>Project Name or Project Identifier</b> Nisku QEII Business Park in LSD's 10-15 Section 5-51-24-W4M		
<b>Disposition Type &amp; Number</b> Name: Walt Kowal Corporate name of consulting company: The Archaeology Group Address: 2526 Bell Court S.W. Edmonton, Alberta T6W 1J8 Phone number: (780) 438-4262 Fax number: (780) 439-4285 E-mail address: <a href="mailto:w.kowal@shaw.ca">w.kowal@shaw.ca</a>		
Name of proponent contact: Seldon Dean, Senior Project Manager Corporate name of proponent: Hopewell Development Corporation Address: 6 <sup>th</sup> Floor, 1122 – 4 <sup>th</sup> Street SW Calgary, Alberta T2R 1M1 Tel. (403) 298-8107 Fax (403) 234-9340 E-mail address: <a href="mailto:Sdean@hopewell.com">Sdean@hopewell.com</a>		
Name of agent: Dana Leithead Corporate name of agent: AL-TERRA Engineering Ltd. Address: 4010 – 76 Avenue Edmonton, Alberta T6B 2P1 Tel. (780) 577-4309 Cell (780) 913-8252 Fax (780) 440-2585 E-mail: <a href="mailto:dleithead@al-terra.com">dleithead@al-terra.com</a>		
Lands Affected 96 ha		
Legal Description	Identifier	HRV
LSD's 10 to 15 Section 5-51-24-W4M	N/A	N/A
<b>Activity type and Anticipated Ground Disturbance</b> The proposed project will entail the creation of a business park on previously undeveloped land and the expected building foundation excavations, infrastructure excavations, drainage operations, and road work could result in the total disturbance of the area upper layers of sediment in the project area wherein any cultural materials would be expected to be found.		

#### Existing Disturbance

Existing disturbance is present in LSD's 11 to 14 due to forest clearing that occurred between 2003 and 2006, and the presence of an old road bed that runs north/south through the west end of the development area in LSD's 12 and 13, the creation of a dugout in the northern margin of LSD 13. LSD's 10 and 15 have been under cultivation for at least 50 years and a dugout was excavated in LSD 10.

#### Landscape and Environmental Information

The proposed project is located within the Central Parkland Ecoregion. Geology is coarse-grained Glacio-Lacustrine sediment. The terrain in the study area is generally flat and featureless and the western 1/3 is poorly-drained with a number of small active and ephemeral wetlands present. LSD's 11 to 14 were not previously cultivated which suggests that this area was considered unsuitable even for agriculture.

Archaeological Sites in Vicinity = FhPi-9, FhPj-6, FiPi-15, FiPj-11, and FiPj-88 (see Figure 3).

Archaeological Sites Impacted = None

Historic Structures in Vicinity = None

Historic Structures Impacted = None

Registered Historic Structures in Vicinity = None

Registered Historic Structures Impacted = None

Previous Permits in Project Vicinity = 77-012, 77-043, 77-054, 82-003, and 06-621

Previous Permits in Impact Area = None

#### Illustrative Materials

Figure 1. Map showing the location of the proposed Nisku QEII Business Park in LSD's 10-15 Section 5-51-24-W4M (after 1:50,000 NTS Maps 83 H/5 – Leduc and H/6 – Cooking Lake).

Figure 2. 2006 air photo of the proposed Nisku QEII Business Park project area.

Figure 3. Map showing the location of previously recorded Historical Resources sites in the vicinity of the proposed Nisku QEII Business Park project (after 1:50,000 NTS Maps 83 H/5 – Leduc and H/6 – Cooking Lake).

## Evaluation

There are no previously recorded sites within the study area (See Figure 3), but 5 sites have been found within 5 kilometers of the study area. All of these located sites are isolated finds and all have been assigned an Historic Resource Value = 0 (HRV=0). The fact that few sites have been found in the general area suggests that this general area may not have been a high use area by prehistoric people.

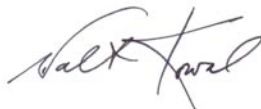
The terrain in the study area is generally flat and featureless and the western 1/3 is poorly-drained with a number of small active and ephemeral wetlands present. LSD's 11 to 14 were not previously cultivated which suggests that this area was considered unsuitable for agriculture. While treed areas appears on Figure 1, air photos revealed that the trees were cleared sometime between 2003 and 2006, due to the snow cover in the area at present the amount of ground disturbance caused by the tree clearing was not ascertained. While Blackmud Creek flows north/south immediately to the west of the development area, the poorly-drained nature of the area closest to the creek suggests that this area is considered to have low archaeological potential.

LSD's 10 and 15 have been cultivated for at least the last 50 years. The fact that these lands had been cultivated or previously disturbed would suggest that this area could be considered to have low archaeological potential for undisturbed archaeological sites, and there would be no archaeological potential within the cultivated area.

*Recommendations (Recommendations regarding archaeological resources must be made by a professional archaeologist.)*

Due to the poorly-drained nature of western 2/3 of the study area and the intensive previous agricultural disturbance in the eastern 1/3 of the project area it is concluded that there is low potential for the discovery of intact, previously unrecorded heritage resources within the proposed project area, and **no further** Historical Resources Assessment work is recommended for the proposed Nisku QEII Business Park in LSD's 10-15 Section 5-51-24-W4M.

Recommendations made by:



Walt Kowal

Date: February 8, 2012

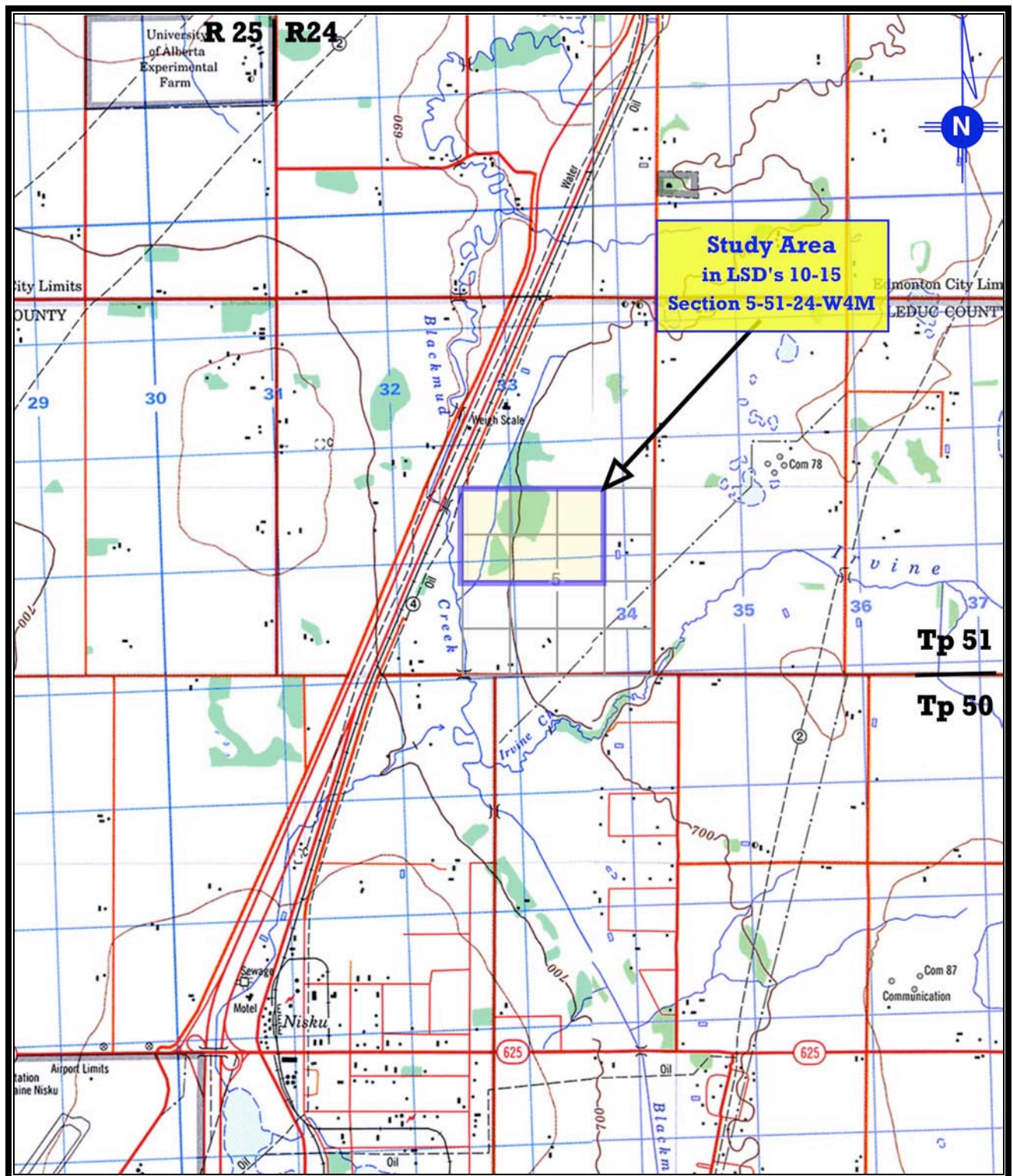


Figure 1. Map showing the location of the proposed Nisku QEII Business Park in LSD's 10-15 Section 5-51-24-W4M (after 1:50,000 NTS Maps 83 H/5 – Leduc and H/6 – Cooking Lake).



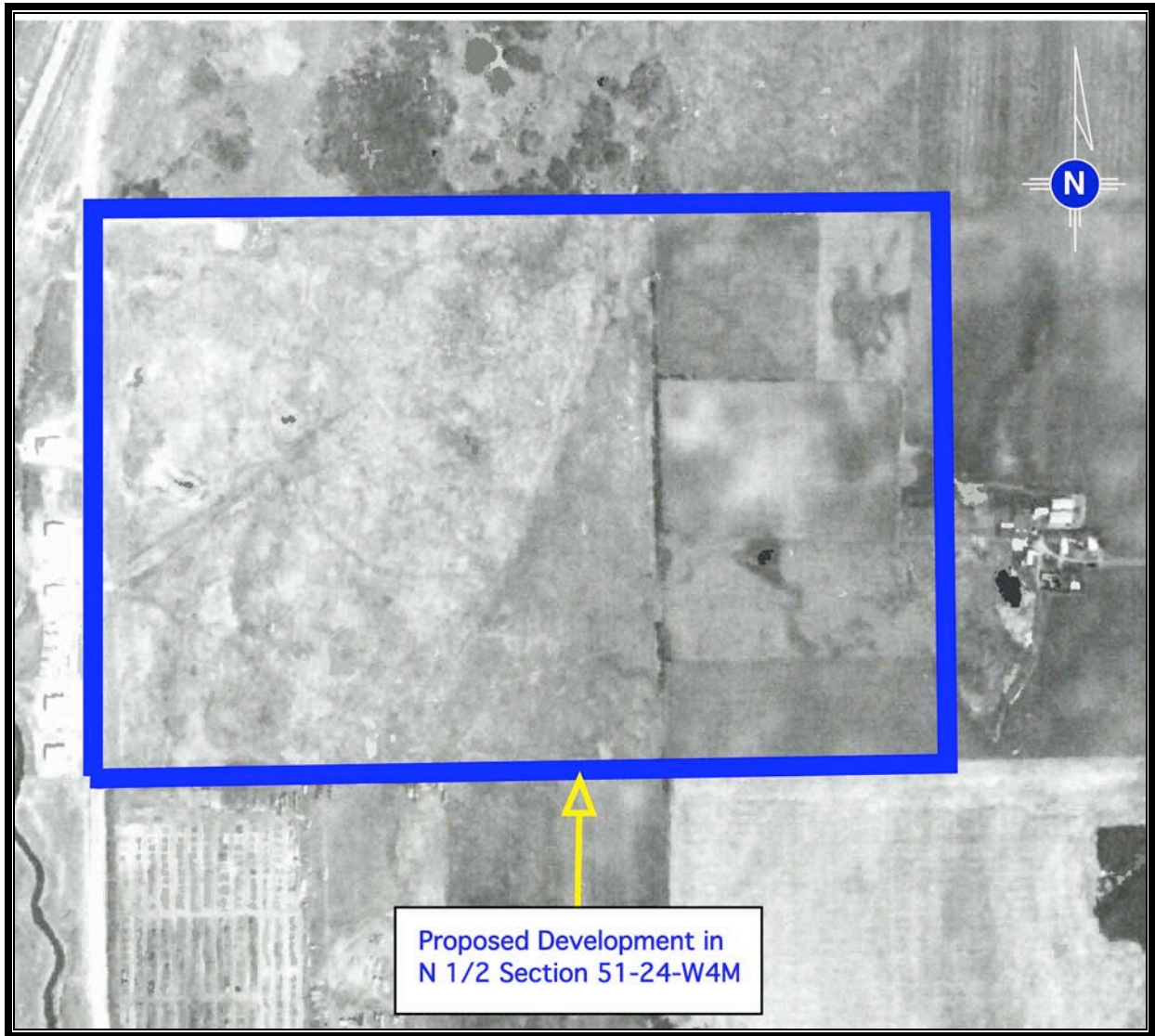


Figure 2. 2006 air photo of the proposed Nisku QEII Business Park project area.



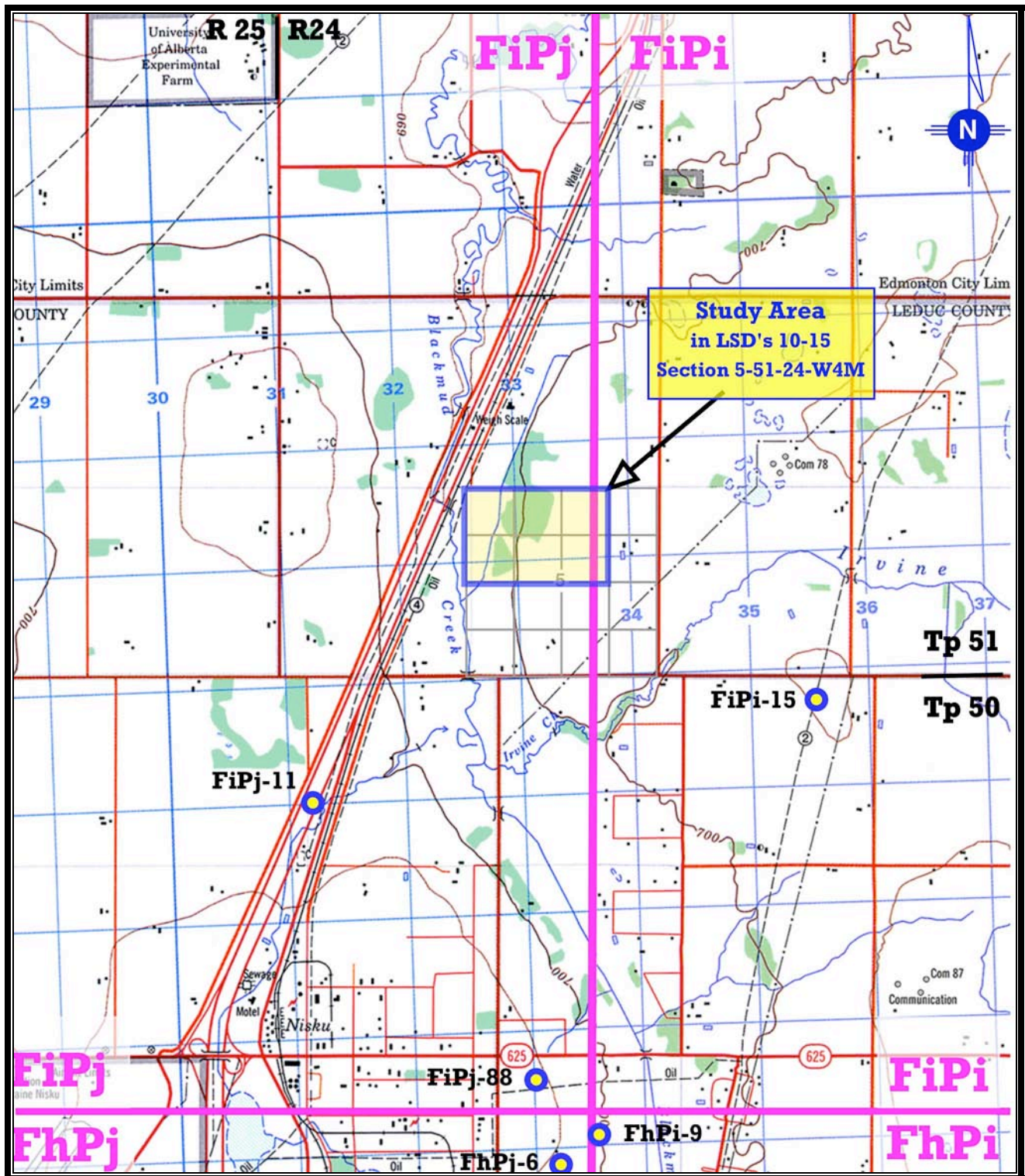


Figure 3. Map showing the location of previously recorded Historical Resources sites in the vicinity of the proposed Nisku QEII Business Park project (after 1:50,000 NTS Maps 83 H/5 – Leduc and H/6 – Cooking Lake).

# Application for *Historical Resources Act* Clearance

## Activity Administration

Date Received: February 21, 2012

HRM File: 4835-12-0032

Purpose of Application: ☒ All New Lands ☐ Additional Lands ☐ No New Lands

Project Category: Subdivisions (4835)

Project Type: ☐ Residential Subdivision ☒ Commercial Subdivision ☒ Industrial Subdivision ☐ Area Structure Plan / Outline Plan ☐ Access Road ☐ Electrical / Utility ☐ Water Supply Line ☐ Sewage Line ☐ Other

ESRI Shapefiles are attached (yes/no) No  
Approximate Project Area (ha) 96  
Lot, Block, Plan  
Other Reference Number

Project Identifier: Nisku QEII Business Park in LSDs 10 to15 Section 5-51-24-W4M

Additional Identifier(s):

Key Contact: Mr. Walt A Kowal  
Address: 2526 Bell Court SW Walt  
Postal Code: T6W 1J8  
E-mail: w.kowal@shaw.ca

Affiliation: Archaeology Group Inc.  
City / Province: Edmonton, AB  
Phone: (780) 438-4262  
Fax: (780) 439-4285  
Your File Number: 780 438-4262

Is the Proponent the same as the Key Contact? ☐ Yes ☒ No If no, complete the following:

Proponent: Hopewell Development Corporation  
Address: 6th Floor, 1122 4th Street SW  
Postal Code: T2R 1M1  
E-mail: sdean@hopewell.com

Contact Name: Seldon Dean  
City / Province: Calgary, AB  
Phone: (403) 298-8107  
Fax: (403) 234--934

Proposed Development Area					Land Ownership			
MER	RGE	TWP	SEC	LSD List	FRH	SA	CU	CT
4	24	51	5	10,11,12,13,14,15	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Listed Lands Affected							
MER	RGE	TWP	SEC	LSD	HRV	Category	

Comments: Due to the poorly-drained nature of western 2/3 of the study area and the intensive previous agricultural disturbance in the eastern 1/3 of the project area it is concluded that there is low potential for the discovery of intact, previously unrecorded heritage resources within the proposed project area, and no further Historical Resources Assessment work is recommended for the proposed Nisku QEII Business Park in LSDs 10-15 Section 5-51-24-W4M.

Historical Resources Impact Assessment:

For archaeological resources:

Has a HRIA been conducted?

☐ Yes

☒ No

Permit Number (if applicable):

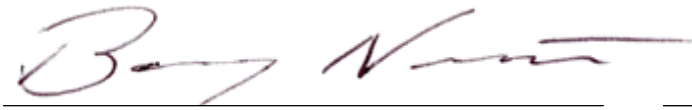
For palaeontological resource:

Has a HRIA been conducted?

☐ Yes

☒ No

*Historical Resources Act* clearance is granted subject to Section 31 of the Resources Act, "a person who discovers an historic resource in the course of making an excavation for a purpose other than for the purpose of seeking historic resources shall forthwith notify the minister of the discovery". The chance discovery of historical resources is to be reported to the contacts identified within the listing.



February 27, 2012

Date

**AMEND THE LEDUC COUNTY QEII BUSINESS PARK LOCAL  
AREA STRUCTURE PLAN BYLAW NO. 23-12**

**BYLAW NO. 01-22**

**LEDUC COUNTY**

---

**A BYLAW TO AMEND THE LEDUC COUNTY QEII BUSINESS PARK LOCAL AREA STRUCTURE PLAN BYLAW  
NO. 23-12**

**WHEREAS**


pursuant to Section 633 of the Municipal Government Act, being Chapter M-26, Revised Statutes of Alberta, 2000, and amendments thereto, the Council of Leduc County may pass a bylaw to amend the Leduc County QEII Business Park Local Area Structure Plan Bylaw No. 23-12.


**NOW THEREFORE**

be it resolved that the Council of Leduc County, duly assembled, enacts that Bylaw No. 23-12 be amended as follows:

1. The QEII Business Park Local Area Structure Plan dated August 28, 2012, as identified as Schedule "A", be amended in accordance with the QEII Business Park Local Area Structure Plan dated September 23, 2021.
2. This bylaw shall take effect on the date of third reading.


Read a first time this 25 day of January, A.D. 2022.

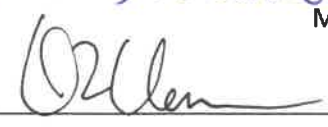
  
\_\_\_\_\_  
MAYOR

  
\_\_\_\_\_  
COUNTY MANAGER

Read a second time this 22 day of February, A.D. 2022.

Read a third time and passed this 22 day of February, A.D. 2022.

  
\_\_\_\_\_  
MAYOR

  
\_\_\_\_\_  
COUNTY MANAGER



# QEII BUSINESS PARK LOCAL AREA STRUCTURE PLAN



PREPARED FOR:  
**Pioneer Skies Business Park Inc.**

September 23, 2021

RPT1-312-21004-8.5-QEII LAMP AMENDMENT-210914

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# 1.0 Introduction

## 1.1 Purpose

The purpose of this proposed amendment to the QEII Business Park Local Area Structure Plan (LASP) is to add approximately 31.5 ha of land into the plan boundary. This will establish a land use framework for the subject lands and outline the objectives, planning principles, servicing, and requirements to develop Light Industrial Business Park uses in accordance with applicable statutory plans.

Once this amendment is approved by Council, further applications for redistricting, subdivision, and development permit applications, will be guided by the LASP, which is required to be consistent with the Municipal Development Plan and Land Use Bylaw.

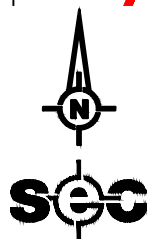
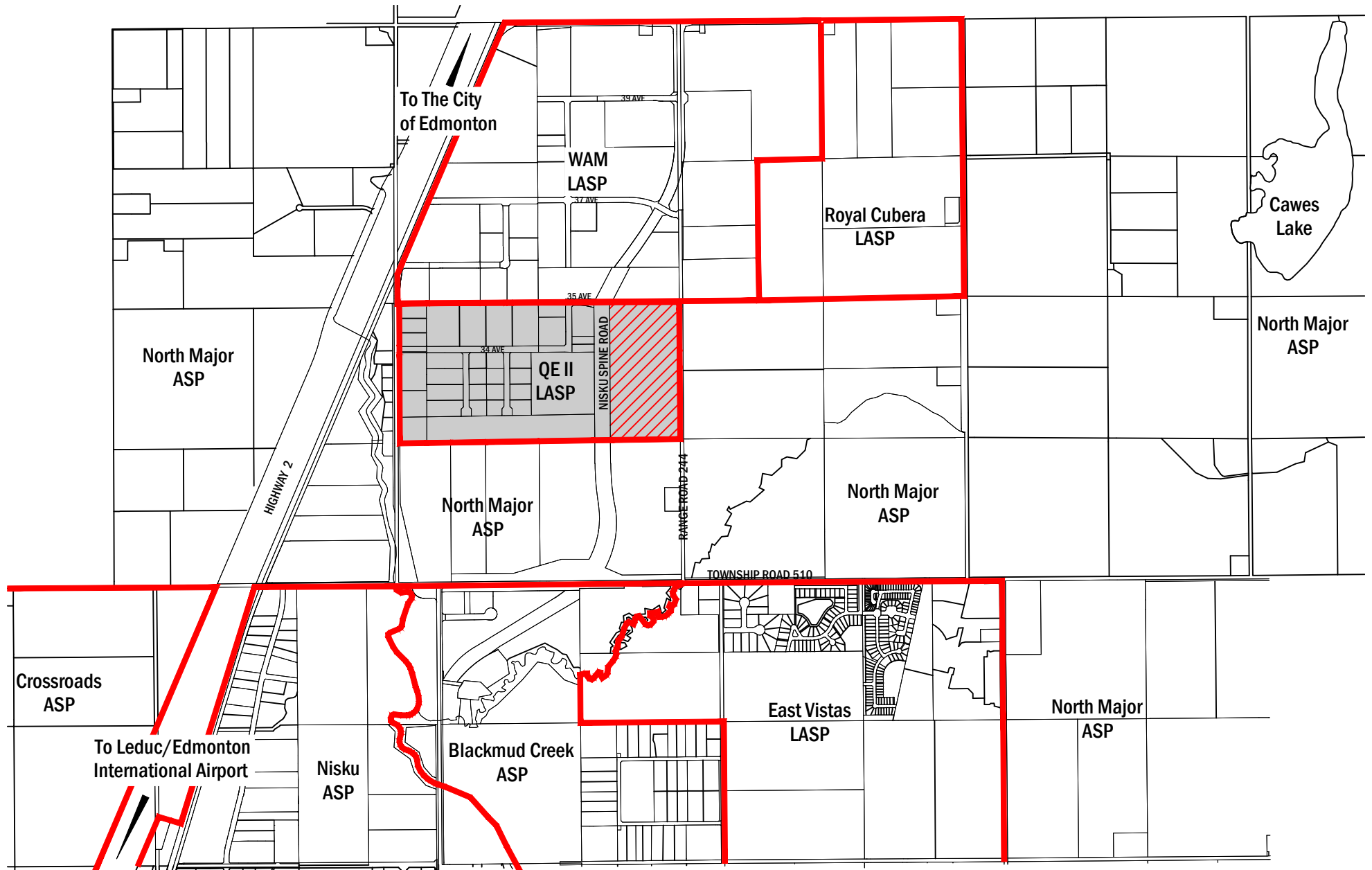
## 1.2 Location



The QEII LASP area is located in Leduc County directly east of the QE II Highway and CP Rail corridor. The proposed Phase 2 amendment area is located east of Nisku Spine Road, north of 30 Avenue, south of 35 Avenue, and west of Range Road 244. The address is 51056 Range Road 244, Leduc County, Alberta.

The majority of the QE II LASP plan area has been developed within Stage 1, but this amendment adds approximately 31.5ha described as part of N.E. ¼ Section 5 Township 51 Range 24 W4M to the plan area as Phase 2, east of Nisku Spine Road. **(See Figure 1)**





## REGIONAL CONTEXT

N.T.S.

### LEGEND

- Subject Lands
- Amendment Area
- Plan Boundary

QE II BUSINESS PARK  
LEDUC COUNTY

## 1.3 Land Ownership

The lands within Phase 1 are subdivided into privately owned industrial small holdings in accordance with the approved LASP. Phase 2 expansion area is owned by Pioneer Skies Business Park Inc. **(See Figure 2)**

## 1.4 Policy Context

The LASP complies with Leduc County's statutory plans, as well as the principles and policies of the Edmonton Metropolitan Region Board Growth Plan (EMRBGP).

### 1.4.1 Edmonton Metropolitan Regional Board

Compliance with the Edmonton Metropolitan Region Board Growth Plan (EMRBGP) is provincially mandated through the Municipal Government Act. A fundamental requirement of the EMRBGP is to intensify development to minimize the development footprint and utilize existing and future infrastructure as efficiently as possible.

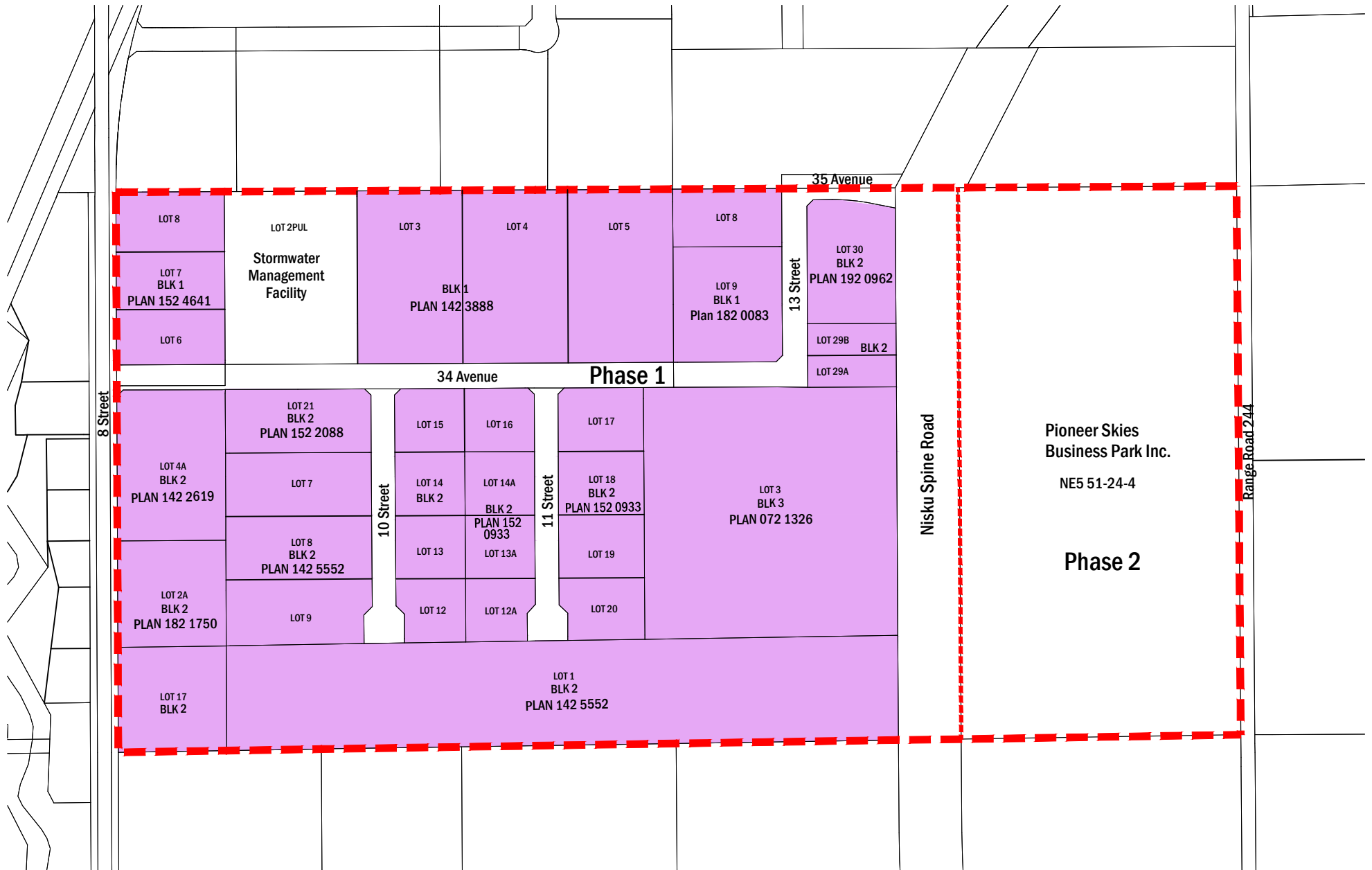
The Plan area is within the boundaries of the EMRBGP and is described as a major employment area. Major employment areas are lands with a concentration of industrial, commercial and/or institutional land uses that have regionally significant business, economic activities and high levels of employment.

Development west of Nisku Spine Road is already complete with internal rural industrial roadways and many industrial businesses currently operating on site. Approximately 31.5 ha of undeveloped land east of Nisku Spine Road has been added to the plan area and is proposed to be developed as a Light Industrial Business Park land use. The QEII Business Park LASP conforms to the policies of the EMRBGP and based off a review of section 4.1(a) of the Regional Evaluation Framework, it does not require approval from EMRB to proceed because it conforms to the higher order Nisku Major Employment Centre Area Structure Plan.

### 1.4.2 Municipal Development Plan

Leduc County's Municipal Development Plan (MDP) was adopted by Council in 2019 and describes planning objectives and policies for a range of land uses throughout the County. The MDP supports growth and prosperity across all regions of the County by identifying and recognizing unique assets and building upon them.

This LASP is described within the MDP as being a major employment area which aims to provide opportunities for a wide range of business development opportunities including commercial, and light and medium industrial development that can be serviced by transit. This LASP complies with the MDP policies and regulations, therefore, no amendment to the approved MDP is required.

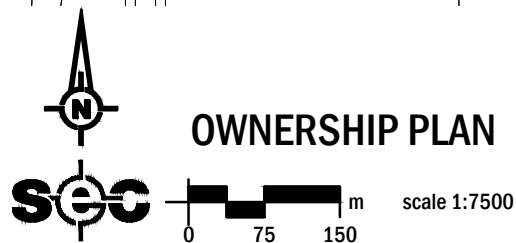


**LEGEND**

Private Owner (Phase 1) LASP Boundary

Phasing Boundary

QE II BUSINESS PARK  
LEDUC COUNTY



### 1.4.3 Nisku Major Employment Centre Area Structure Plan

The Nisku Major Employment Centre (MEC) Area Structure Plan Bylaw No. 14-21 was adopted on September 28, 2021. The purpose of this ASP is to guide and direct development of local area structure plans to accommodate new and future business, while supporting existing industrial land use by outlining objectives, policies, natural areas, transportation, utility networks and staging plans for the next 30 years.

The QEII Business Park LASP is described within the Nisku MEC ASP as being part of the North Nisku area where both primary and secondary developments are permitted. Warehousing and logistics are primary developments and are highly encouraged to develop within Nisku North. Secondary developments such as, commercial, retail and hospitality are also encouraged along major arterial roads such as the Nisku Spine Road. The QEII Business Park LASP meets the goals, objectives, and policies of the Nisku MEC ASP, therefore, no amendment is required.

The QEII LASP will develop in accordance with the following general policies of the MEC.

- The Nisku MEC Area Structure Plan encourages redevelopment and infill of brownfields or under-utilized properties and the reuse of structures. A leapfrog approach of development is not supported.
- No heavy industrial development shall be allowed within the Nisku Major Employment Center Area Structure Plan.
- Development shall follow architectural and landscape design guidelines along key entrances, roadways and nodes as outlined in policy or in Local Area Structure/Redevelopment Plans.
- Local Area Structure Plans (LASP's) and Local Area Redevelopment Plans (LARP's) are required prior to development in order to provide more specific and detailed information and a localized vision. LASP's and LARP's should include at minimum:
  - + Objectives,
  - + Policies,
  - + Transportation and infrastructure,
  - + Environment Constraints,
  - + Parks and Recreation,
  - + Staging and Development Pattern(s),
  - + Public Engagement,
  - + Outline Plan Requirements and
  - + Other requirements such as floor area ratios to maximize building sites, relevant statistical data and specific background information.

#### 1.4.4 Leduc County Land Use Bylaw

Leduc County Land Use Bylaw (LUB) No. 7-08 was approved in March 2009 and updated in May 2021. The LUB currently specifies a range of permitted and discretionary land use districts as well as standards, regulations, and other provisions to administer the use, development, and subdivision of land within each district.

Lands currently in operation west of the Nisku Spine Road are designated as Industrial (IND) and lands east of Nisku Spine Road are designated Agricultural (AG).

A new Land Use Bylaw update is being initiated and anticipated to be adopted in 2023.

#### 1.4.5 Edmonton International Airport Vicinity Protection Area Regulations



The Edmonton International Airport Vicinity Protection Area (AVPA) regulations are governed by provincial legislation as part of the Municipal Government Act (MGA). The regulations were adopted to control how land is developed in certain areas around the airport, due to the potential noise from aircrafts flying overhead as they arrive or depart the Edmonton International Airport.

The AVPA regulation allows a variety of industrial and commercial activities however may apply acoustical conditions on buildings within certain areas of the 2040 Noise Exposure Forecast contours (NEF). No electronic facilities protection zones or height restrictions are imposed within the QEII Business Park LASP and the proposed lands are in alignment with the regulations of the AVPA.

## 2.0 Development Area

The following technical information is specific to lands within Phase 2 of the QE II Business Park LASP.

### 2.1 Topography and Vegetation

The Plan area contains no significant physical features. The land is relatively flat with slight undulations. There is a general slope from east to west draining towards the Nisku Spine Road and eventually to the Blackmud Creek drainage channel that parallels CP Rail and the QE II Highway to the west.

Much of the property has been under agricultural production for many years. Following a wildlife sweep of the property, in accordance with Provincial requirements, a number of trees surrounding the central homestead were removed in the summer of 2021 to allow for demolition activities of existing buildings. **(See Figure 3)**

### 2.2 Geotechnical Conditions

A Geotechnical Investigation was completed for the subject lands in November of 2020 by J.R. Paine and Associates Ltd. Eight test holes were located throughout the east half of NE 5-51-24 W4M.

Soil samples from the eight test holes were tested for moisture content and contamination. Groundwater levels were within 3 meters of the surface in three (3) of the eight (8) test holes drilled on the property. Groundwater seepage may occur in some trenches on site while servicing, and some considerations will need to be made when constructing on site stormwater management facilities, but no other concerns of note were found through the investigation.

### 2.3 Wetland Assessment

The Wetland Assessment and Impact Report completed by EnviroMak Inc. in September of 2021 found that the assessment area contained five wetland/waterbody features. Of the five features found, one is classified as a natural wetland, two are classified as ephemeral waterbodies and two are considered man-made wetlands. The ephemeral water bodies and the natural wetland will require water act approval for any alterations. Compensation will need to be paid for any alterations required to be made to the 2.85 ha natural wetland due to the development, while ephemeral water bodies are not required to be compensated for. The natural wetland is considered as a 'C' value wetland.

No significant wildlife or plant species were found within the waterbody features on site, however nesting birds' vulnerable periods and the general amphibian breeding periods will need to be respected when alterations to the wetland are to occur.



## 2.4 Phase 1 Environmental Site Assessments

Based on the findings of the Phase 1 ESA completed by Pinchin Ltd., it has been determined that the plan area is generally flat, vacant and has fallen into overall disrepair. Three aboveground storage tanks (ASTs) were observed in the central portion of the Site. Two ASTs were observed adjacent to the east and west of a shed, while the third AST was located within the shed. All the ASTs were observed on elevated metal stands with no secondary containment. The use of polychlorinated biphenyls (PCBs) was commonplace circa 1980, given the construction of structures before 1980, there is potential that on-Site electrical equipment may contain PCBs. Asbestos-containing materials (ACMs) are commonly found in building construction materials. Asbestos use in Canada was formally banned in December 2018. Given the building of construction of on-Site structures (circa 1960), there is potential for ACMs to be present in the buildings.

At time of writing this LASP document, the buildings and structures located on the property have been removed or are being removed and remediated in accordance with recommendations contained within the Pinchin ESA report.

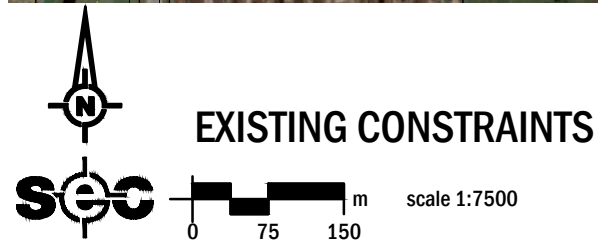
## 2.5 Existing Land Use



The lands within the existing Plan area are a mix of business park and business industrial. The lands south of 30 Avenue is Urban Service Area. The lands west of Nisku Spine Road are designated for Industrial use and to the north is districted for Business Park land uses.

The subject lands within Phase 2 are currently agricultural and the homestead and associated farm buildings, storage and machinery are being removed from site. Where possible, materials are being reused or recycled, such as metal from storage bins, wood from fences and barns, concrete sidewalk blocks and a large tractor tire repurposed for a planter in a local pumpkin patch. Of special note, an intact vintage dairy barn built in the 1950's was moved off site to a farm 5 miles east of Beaumont for continued use.





— — — Easement/Utility Right of Way

■ ■ LASP Boundary

QE II BUSINESS PARK  
LEDUC COUNTY

312-21004-01-PRF003.DWG  
Jjurincic December 22, 2021

## 2.6 Surrounding Land Uses

The Plan area is surrounded by a combination of industrial and agricultural development.

To the north south and east of Phase 2 is agricultural lands with Business Park Land Use in the new MEC ASP. Developed industrial lots are accessed from 35 Avenue to the west and stretch over to QE II Highway.

## 2.7 Environmental Reserve

There is a predominant water course that runs diagonally east/west through the east portion of the Phase 1 plan area named Irvine Creek that has been dedicated as Environmental Reserve. The proposed Pioneer Skies (Phase 2) expansion area does not contain any areas to be dedicated as Environmental Reserve.

## 2.8 Abandoned Wells

According to the Alberta Energy Regulator (AER) there are no abandoned wells located within the amendment boundary.

## 2.9 Historical Resources

A Historical Resource Act clearance was granted for the subject lands of Pioneer Skies Business Park and is included under separate cover.



### 3.0 Development Concept



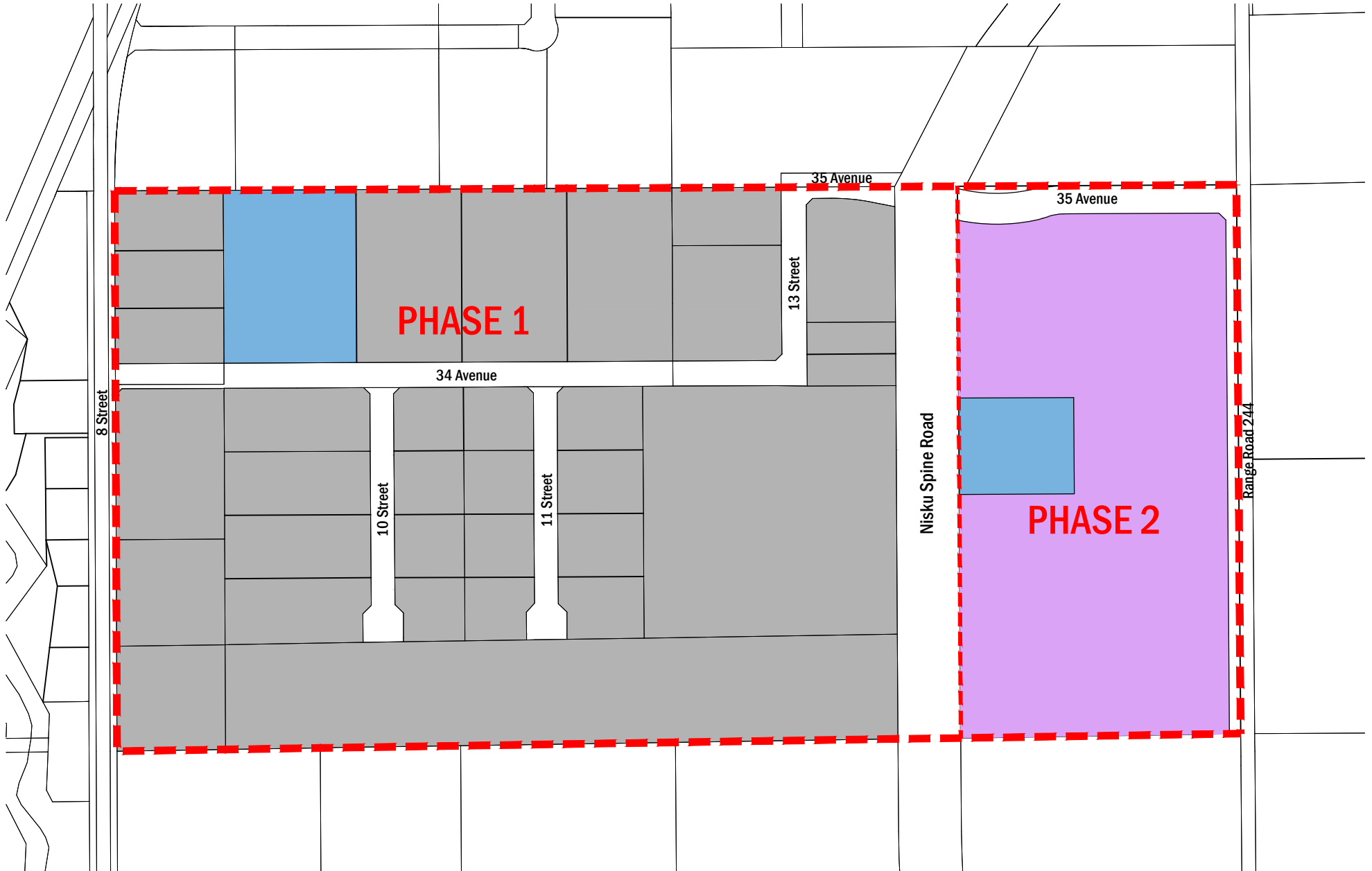
The proposed Development Concept for this amendment to the QEII LASP extends the boundary of the existing LASP east of the Nisku Spine Road to Range Road 244, adding about 31.5ha of land to the existing LASP. The plan for the Pioneer Skies expansion area includes one stormwater management facility and several business industrial lots with individual access from 35 Avenue and Range Road 244 (**See Figure 4**).

The development will allow for Business Park and Light Industrial uses, in accordance with the land use policies for Nisku North, contained in the recently approved Nisku MEC ASP. The business and industrial uses will benefit from high visibility and access opportunities near the QE II Highway and off the Nisku Spine Road. The proposed development of Phase 2 adds to the operating businesses in the area that contribute to the provision of services and the commercial tax base within Leduc County.






Land uses for Phase 2 of QE II LASP are listed in **Table 2** below.

**Table 2 - Land Use Statistics**

	Area (ha)	% of GA
<b>GROSS AREA</b>	<b>31.5</b>	
Nisku Spine Road	0.00	
<b>GROSS DEVELOPABLE AREA</b>	<b>31.5</b>	
Stormwater Management Facilities (PUL)	2.27	7.2%
Roadways	2.95	9.2%
Business Park Lots	26.29	83.6%
<b>TOTAL AREA</b>	<b>31.5</b>	<b>100.0%</b>



**LEGEND**

- |   |                        |   |                                |   |               |
|---|------------------------|---|--------------------------------|---|---------------|
|  | Existing Business Park |  | Stormwater Management Facility |  | LASP Boundary |
|  | Business Industrial    |  | Phasing Boundary               |   |               |

**QE II BUSINESS PARK**  
LEDUC COUNTY

### 3.1 Business Park

In accordance with Nisku Major Employment Centre (MEC) ASP, the major land use within the Pioneer Skies development is described as Business Park. This land use consists of light industrial businesses such as warehousing, manufacturing and logistics operated in such a way as to create minimal disturbance outside of the enclosed buildings and to be compatible with non-industrial development.

Development within Phase 2 shall comply with the regulations within IB – Industrial Business District, BP – Business Park District, or LI – Light Industrial District of the Leduc County Land Use Bylaw. If one of the above districts does not satisfy the regulations required for a specific development, a Direct Control District could be created as a site-specific use. Should the districts above be replaced or removed from the Land Use Bylaw, the districts most similar and suitable for this development shall apply.

Phase 2 of the QE II LASP will comply with the following land use policies within 4.4.2 of MEC.	
Policy 1	Development in North Nisku shall not negatively impact or interfere with existing or future warehousing, logistics or commercial and office development and where possible should be placed to maximize linkages and logistic to other developments.
Policy 2	Parcel size may be flexible to meet the needs of both primary and secondary uses as long as the uses are compatible and meet safety and engineering standards.
Policy 3	Businesses shall operate in such a way as to limit disturbance outside of the enclosed buildings or property. Buffers and/or transitional land uses to minimize conflicts and nuisances between uses shall be identified in Local Area Structure Plans or Redevelopment Plans.
Policy 4	No outdoor storage areas shall be allowed as a primary use. Outdoor storage may be allowed as a secondary use in support of a primary use, so long as the storage is minimized in size, and duration. Any outdoor storage shall be fully screened.
Policy 5	Commercial and retail services are encouraged to locate in high-visibility areas and shall have access to local and major transportation networks. Developments in these areas shall have a higher standard of site and landscaping standards and shall have limited outdoor storage for the use of inventory and building materials only.

Development within Phase 2 of the LASP is similar in nature to existing businesses in the area and will generally comply with the policies above. Landscaping within development setbacks shall be comprised of native species hardy to central Alberta climate in accordance with the requirements of the Leduc County Land Use Bylaw. It is anticipated that nearby development will be compatible with the proposed business park land use. Landscaping may be used in combination with other features to help screen outdoor storage from view of nearby public roadways.

Parcel sizes shall be determined through subsequent application for subdivision. The extension of 35 Avenue east of the Spine Road and upgrades to Range Road 244 will help provide access to future development east of the plan area.

Without any planned pedestrian destinations or internal roadways, pedestrian activity is anticipated to be very low within the business park. The County's rural road cross-section drains stormwater through ditches and does not include dedicated sidewalks. Planned roads abutting the development are generally straight, providing good visibility for traffic to see



pedestrians. On occasions where pedestrians use the road, there is sufficient width for pedestrians to safely walk along the side with passing vehicles. Currently there is no transit route to the subject property. If local transit routes are established in the future, bus pads should be installed for comfort and convenience of transit riders at the bus stop locations yet to be determined.

A stormwater management facility is planned next to a portion of the Nisku Spine Road. Landscaping of the facility will be designed to be low maintenance and naturalized in accordance with Leduc County Engineering Standards and applicable Provincial standards. The proposed facility provides dual benefit of functional stormwater management and views of a natural setting for passing vehicles and local workers.

## 3.2 Municipal Reserve

There is currently no Municipal Reserve dedicated within Phase 2 of the LASP. Consistent with the industrial lands in Phase 1, Municipal Reserve for Phase 2 is anticipated to be provided as cash in lieu for the proposed amendment area, in accordance with the Municipal Government Act.

## 4.0 Transportation

### 4.1 Queen Elizabeth II Highway

Although the QE II Highway (Gateway Boulevard/ Calgary Trail) does not directly border the Plan area, all highly visible developments in this area adjacent to the QE II are governed by the Highway 2 Corridor Landscape Design Guidelines to ensure high quality appearance. No direct access to the QE II from the Plan area exists now or in the future.

The Phase 2 lands are not visible from the QE II and are not subject to the design guidelines.

### 4.2 Existing Business Access

Existing businesses located within Phase 1 are accessed from 35 Avenue at the Nisku Spine Road on the east and from 8 Street on the west. 8 street runs parallel to QE II Highway and north through the WAM LASP, but no longer connects to 41 Avenue as the connection was removed with the construction of the QE II interchange. With visibility from QE II and access from the Nisku Spine Road, Phase 1 has excellent access for its businesses.

The proposed extension of 35 Avenue north of the Phase 2 plan area aligns with the existing intersection of 35 Avenue on the east side of the Spine Road.

### 4.3 Nisku Spine Road

The Nisku Spine Road is currently constructed as a four-lane divided arterial between 41 Avenue and Township Road 510. It is planned to be a future 6 lane divided arterial connecting City of Leduc to City of Edmonton through the Nisku Business Park. The Spine Road divides the LASP in two with Phase 1 on the west and Phase 2 on the east. Direct access to parcels from the Spine Road will not be permitted. The access to parcels is planned to be from future extension of 35 Avenue across the Spine Road and from upgraded Range Road 244.

## 4.4 Transportation Impact Analysis



A Transportation Impact Analysis (TIA) was undertaken by Bunt & Associates to determine the impacts of the proposed development traffic on the existing roadway network and identify connections with future roadway systems.

The findings within the TIA anticipate no modifications to the 41 Avenue/Nisku Spine Road Intersection based on the additional development. 35 Avenue shall be constructed as a two-lane undivided collector roadway from the Spine Road to service the subject lands, however right of way for an ultimate four-lane undivided collector roadway should be protected for when the road is extended east to Range Road 243 to service future industrial development. The 2021 TIA report is submitted under separate cover.

## 5.0 Utility Services

### 5.1 Water

Water main service will be extended east along 35 Avenue from the existing 450mm diameter water main located on Spine Road and south through the future development (Phase 2). Water servicing will be provided to each lot and include a fire hydrant network along the roadway for protection. The water main will also be extended to the east end of 35 Avenue to provide service to the future lands east of Phase 2. Water main looping within Phase 2 is to be confirmed once a Hydraulic Network Analysis is completed. **(See Figure 5)**

### 5.2 Sanitary Sewer Services

Sanitary sewer servicing will be brought into the future development from the existing 300mm sanitary sewer main located on the east side of Spine Road **(See Figure 6)**. The existing sanitary sewer main connects to the Southeast Regional Trunk line (SERT) near the north boundary of the LASP.

The sanitary sewer will be extended east along 35 Avenue and south through the future development (Phase 2). The system will be designed to accommodate the anticipated sanitary flows for the future commercial/industrial development. Due to the insufficient pipe size and shallow depth, the sanitary sewer will not be able to accommodate sanitary flows from the future lands east of Phase 2.

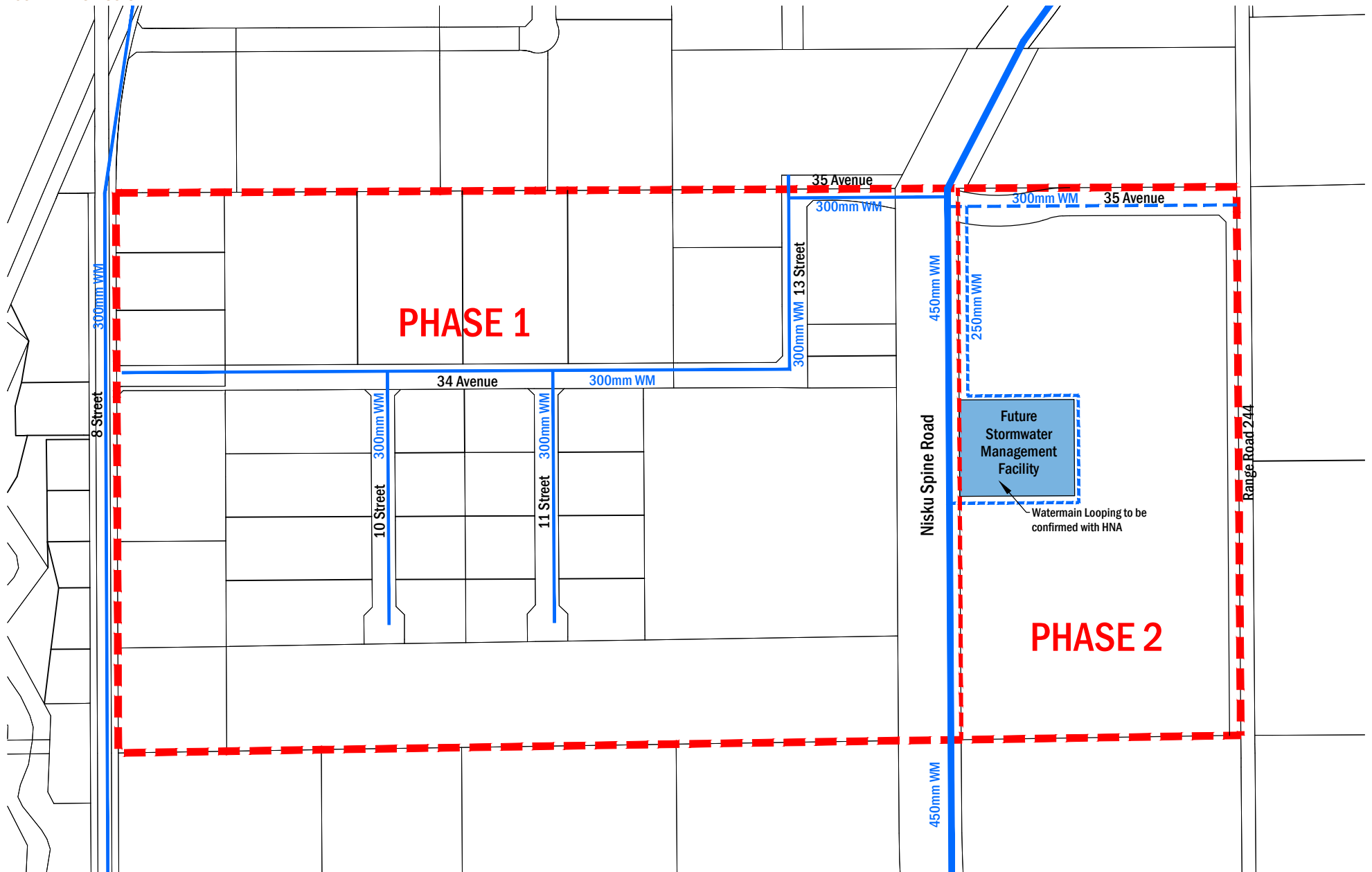
### 5.3 Stormwater Management Facilities (SWMF)

The existing overland drainage patterns for Phase 2 are generally from the east to the west. The proposed site grading will slightly alter the drainage patterns to ensure the flows are directed to the proposed SWMF **(See Figure 7)**. The 2.3 hectare SWMF will be located on the west end of Phase 2 in a centralized location. Overland flows will be directed to the SWMF through the roadway ditch system. From the SWMF, an underground storm pipe will discharge water into the existing Spine Road ditch where it flows through a system of ditches and culverts to the south and west, ultimately into Blackmud Creek. Discharge from the facility will be limited to a flow rate of 2.0 L/s/ha.

The Storm Water Management Facility will be designed as a low maintenance naturalized facility with a shallow vegetated swale along the bottom to provide necessary water quality treatment. Open water within the facility will be restricted to adhere with the requirements of the Edmonton International Airport. The wetland vegetation and naturalization of the facility will consider passive bird hazard mitigation measures to ensure that birds do not use the site, especially large flocking waterfowl such as gulls and geese. The facility will be designed to comply with Alberta Environment's regulations for water quality and treatment.

## 5.4 Shallow Utilities

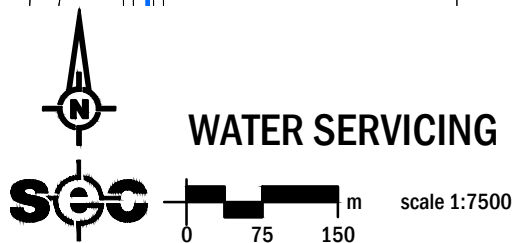
Shallow utilities including street lighting, natural gas, power and communication services are available for extension into Phase 2 from the adjacent developments. Gas, power and communication lines will be located in road right-of-way or through easements on private land. Services will be available to all lots. Connections to lots will be the responsibility of landowners and individual developers.



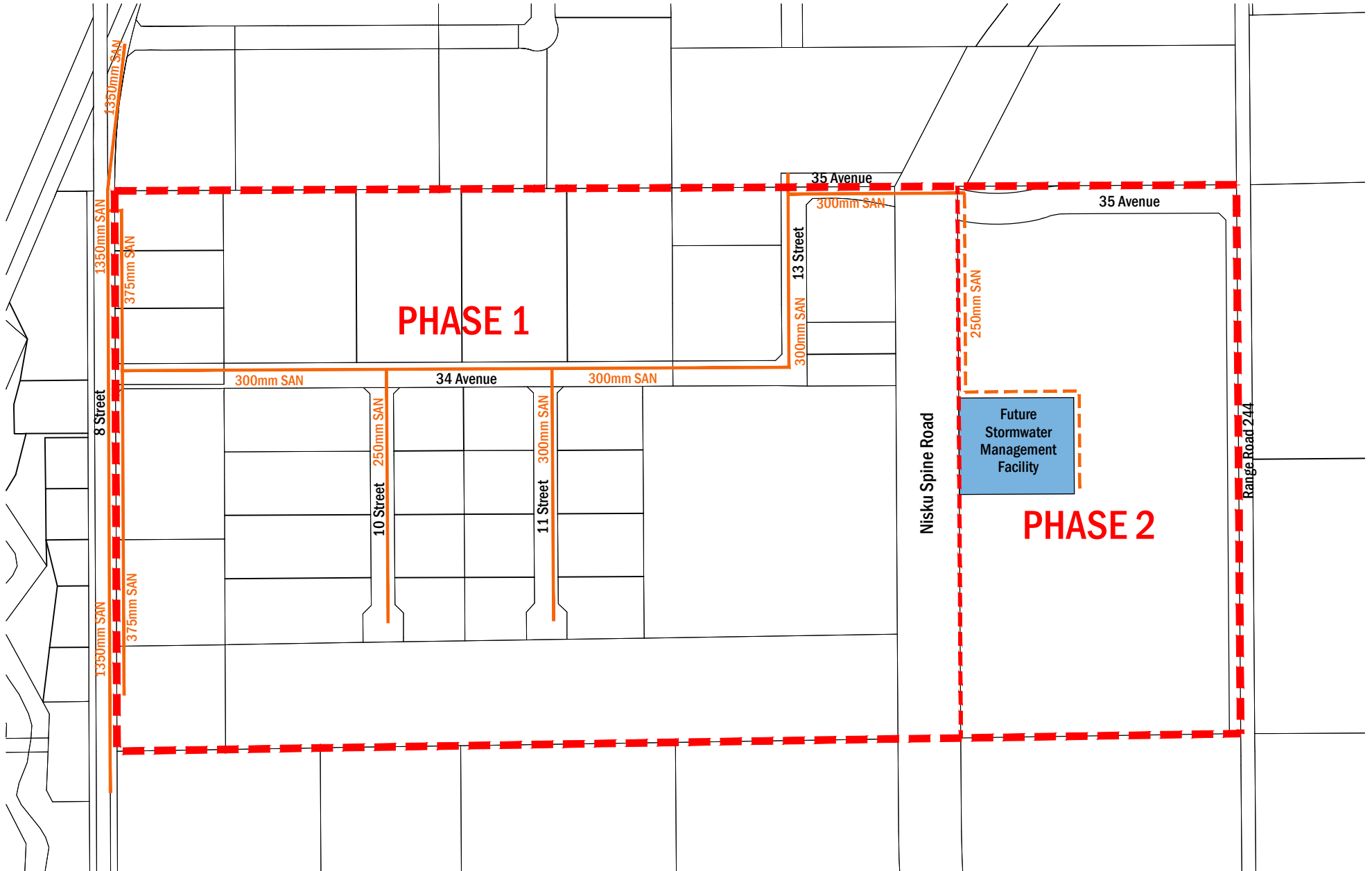
**LEGEND**

- |  |                          |  |                        |  |                  |
|--|--------------------------|--|------------------------|--|------------------|
|  | Existing 300mm Watermain |  | Future 300mm Watermain |  | LASP Boundary    |
|  | Existing 450mm Watermain |  | Future 250mm Watermain |  | Phasing Boundary |

QE II BUSINESS PARK  
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**LEGEND**

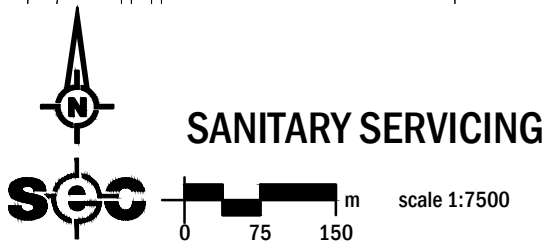
— Existing Sanitary

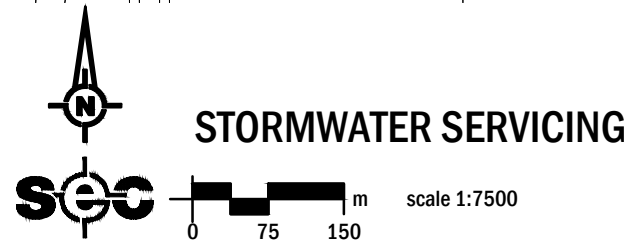
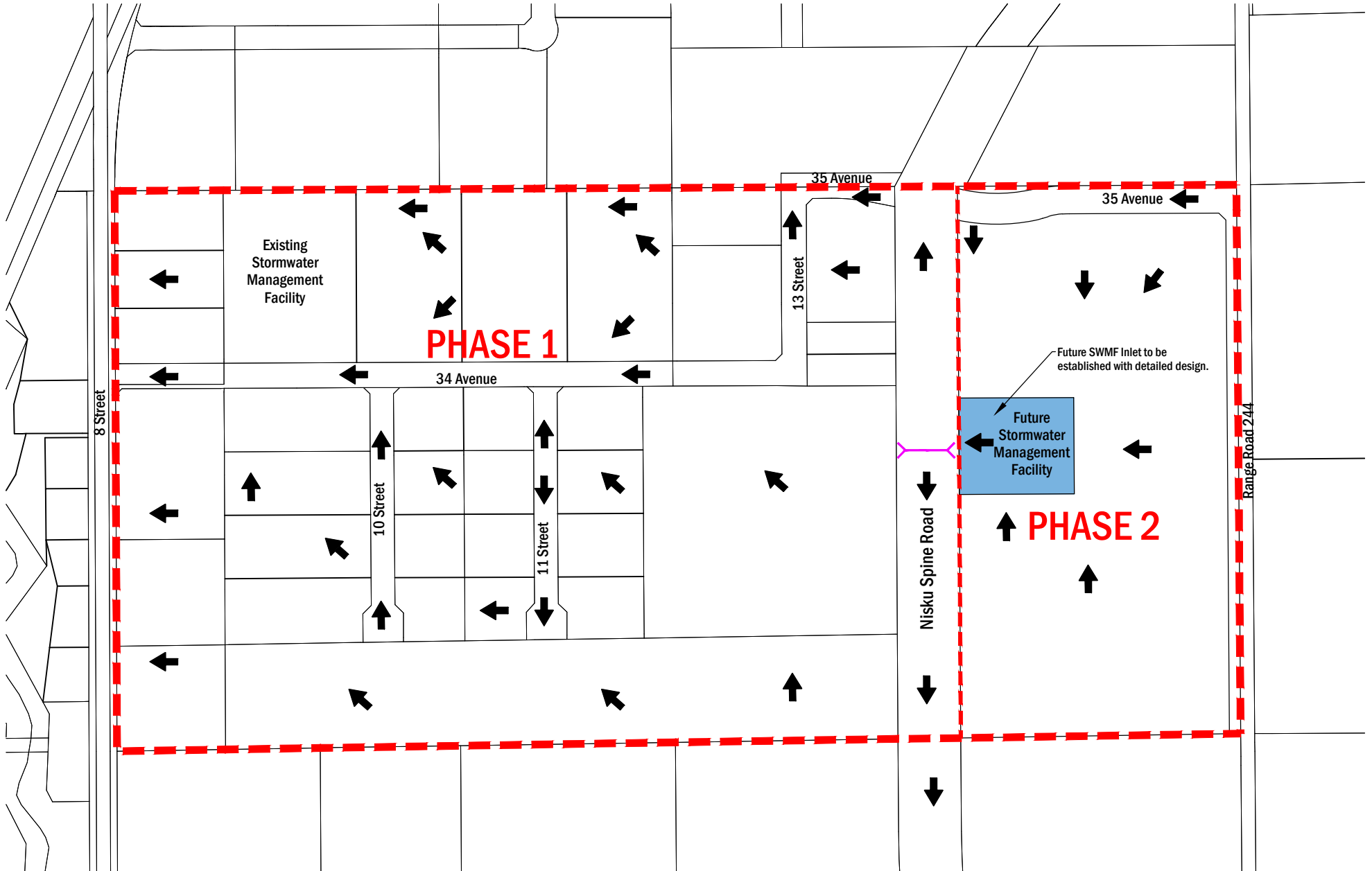
- - - Future Sanitary

— LASP Boundary

- - - Phasing Boundary

QE II BUSINESS PARK  
LEDUC COUNTY





**LEGEND**



Stormwater Management Facility



Direction of Major Flow



800mm Culvert Drainage Crossing



Phasing Boundary



LASP Boundary

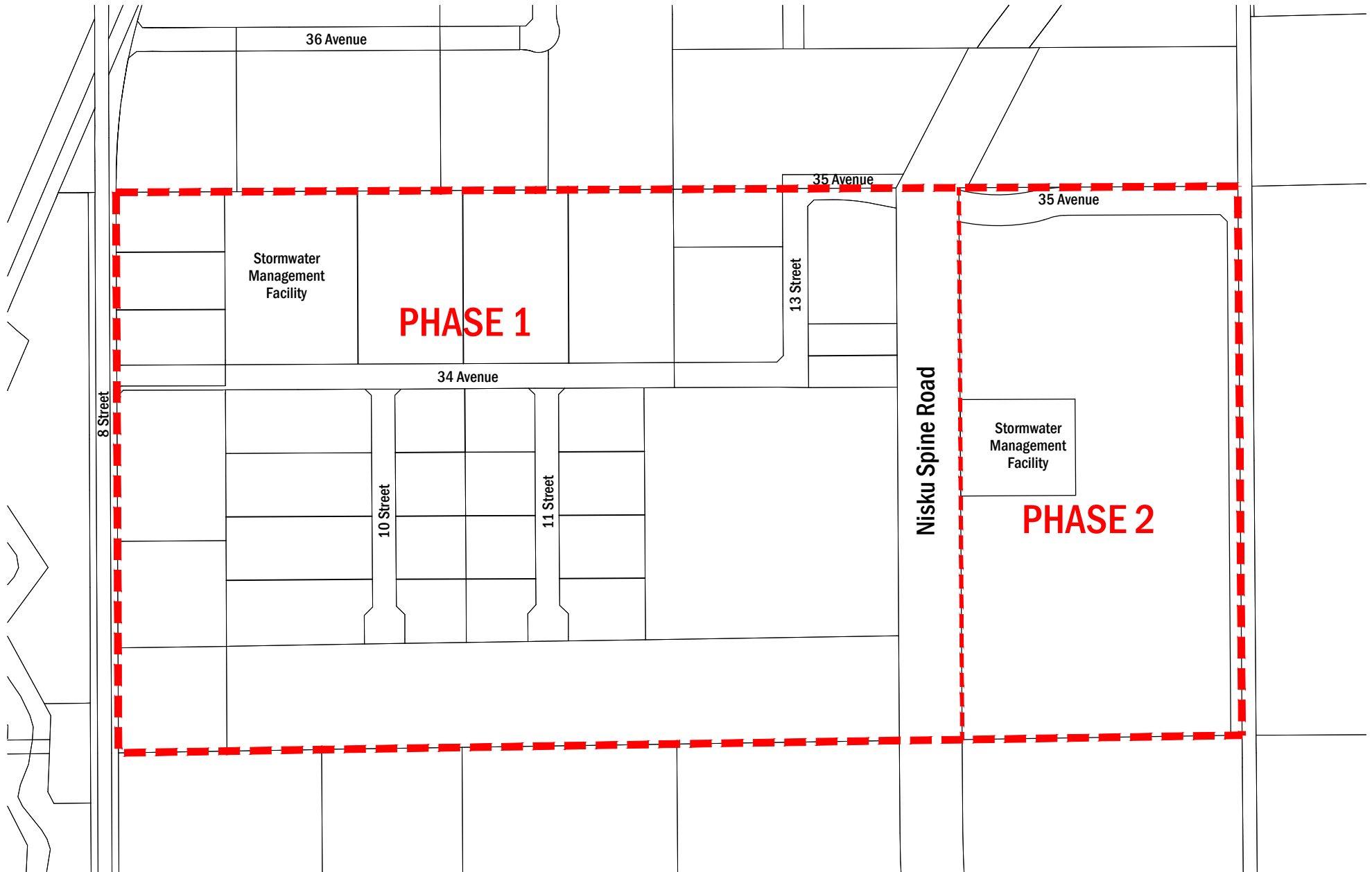
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## 6.0 Implementation

### 6.1 Development Staging

The land and infrastructure located west of Nisku Spine Road (Phase 1) has been fully developed. The proposed amendment area contains approximately 31.5 hectares of land east of the Nisku Spine Road, which may take about 5 years to develop depending on market demand for business industrial land use.

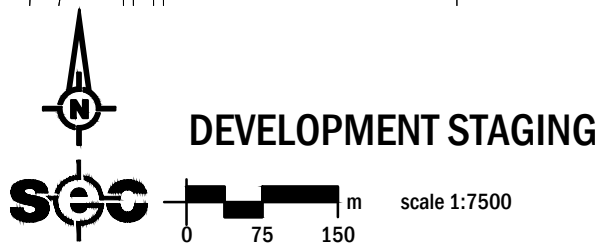
With only one access planned, development will proceed from the north off 35 Avenue. It is important to note that the staging being proposed is conceptual. Construction will proceed in an orderly fashion dependent upon market conditions and development constraints. Redistricting and subdivision applications will be submitted to Leduc County for review and approval by the Subdivision Authority. **(See Figure 8)**



**LEGEND**

- LASP Boundary
- .- Phasing Boundary

**QE II BUSINESS PARK**  
LEDUC COUNTY



# APPENDIX A

## Technical Studies